

New Features

The following features have been added since the last major release of TIBCODataSynapse™High-Performance Computing Cloud Adapter (HPCCA).

Version 2.1.0

Restarting HPCCA TIBCO DataSynapse™High-Performance Computing Cloud Adapter can now restart,without restarting TIBCO DataSynapse GridServer® Manager for changes incloudprovider.properties file. You must set the USE_HPPCA_AUTO_RESTARTproperty present in cloudprovider.properties file to true. For more information, seeTIBCO DataSynapse™High-Performance Computing Cloud Adapter User Guide. VM batch termination for GCP By setting BATCH_VM_TERMINATION property to true in cloud provider, you cannow terminate virtual machines in batch sizes. Park Engine feature for Aggressive Scale Down Using Park Engine feature, you can now mark engine daemon as a candidate toterminate, if busy engine count is less than or equal to MINIMUM_BUSY_ENGINE.This is based on value provided in MINIMUM_BUSY_ENGINE. For more information,see TIBCO DataSynapse™High-Performance Computing Cloud Adapter User Guide.

Version 2.0.0

Support for multiple cloud providers DataSynapse HPCCA now supports engines for multiple cloud providers mentionedin the cloudprovider.properties file. For more information, see TIBCO DataSynapse™High-Performance Computing Cloud Adapter User Guide. Aggressive scale down of engines If no task is running on the DataSynapse GridServer® Engine, DataSynapse HPCCAreduces the number of engines irrespective of the ENGINEIDLETIMEOUT value. Toenable this feature, set the AGGRESSIVE_SCALEDOWN property in the cloudprovider.properties file to true. For more information, see TIBCO DataSynapse™High-Performance Computing Cloud Adapter User Guide. Monitoring engines on specific brokers DataSynapse HPCCA now monitors engines on particular brokers. A list of brokers isprovided in the BROKER_HOSTNAME property in the cloudprovider.properties file. Formore information, see TIBCO DataSynapse™High-Performance Computing CloudAdapter User Guide.

Version 1.5.0

No new features have been added in this release.

Version 1.4.0

Support for Google Cloud Platform Starting from this release, DataSynapse™High-Performance Computing CloudAdapter (HPCCA) can be configured for Google Cloud Platform (GCP) by using the `cloudprovider.properties` file. For more information, see TIBCO DataSynapse™High-Performance Computing Cloud Adapter User Guide. Consideration for DataSynapse HPCCA engines for calculating computational need Starting from this release, engines that are not created by DataSynapse HPCCA canbe included when calculating computational needs. To enable this feature, set the `CONSIDER_NON_HPCCA_ENGINES` property in the `cloudprovider.properties` file to true. Formore information, see TIBCO DataSynapse™High-Performance Computing CloudAdapter User Guide.

Version 1.3.0

Support for scale sets Scale sets that allow you to create and manage a group of identical, load balancedVMs on Azure are now supported for Windows and Linux 64-bit platforms.

Version 1.2.0

Support for custom images Custom images for both Windows and Linux 64-bit platforms are now supported onAWS and Azure. Support for auto scaling group Autoscaling groups for Windows and Linux 64-bit platforms are now supported onAWS. Grid Library Deployer A new feature to assist in deployment is a TIBCO-supported tool for deploying gridlibraries from the command line. The included `GridLibraryDeployer.zip` is a simple Java-based grid library deployment utility based on the `GridLibDeployer.java` class included inthe TIBCO DataSynapse GridServer® SDK. Enter `java -jar GridLibraryDeployer.jar` at thecommand line. A list of options is displayed. Support for SSL-Enabled DataSynapse GridServer® Manager DataSynapse HPCCA can now be installed on SSL-enabled managers. Earlierversions did not support SSL-enabled managers.

Version 1.1.0

Windows engines and initial reconfiguration changes The initial release of the DataSynapse HPCCA only included Linux-based engines. Itnow supports Windows engines. Also, the DataSynapse HPCCA now reconfigures an existing DataSynapseGridServer® Engine installation to enable it to connect to the current gridenvironment. This is done rather than the previous method of a fresh install, to enableyou to configure the virtual machine to properly connect into your infrastructure and toenable for the preinstallation of things like grid libraries and caching solutions.

Version 1.0.0

TIBCO DataSynapse™ High-Performance Computing Cloud Adapter DataSynapse HPCCA extends the functionality of DataSynapse GridServer® by enabling it to dynamically create virtual machines and provision them with the EngineDaemon. It was created to allow customers to temporarily increase their compute capacity during periods of unusually high load on their DataSynapse GridServer® deployment. The initial release, version 1.0.0, includes Linux 64-bit engines and a very simple cloud management algorithm.

Changes in Functionality

No changes have been made in Functionality as of this release of TIBCO DataSynapse™ High-Performance Computing Cloud Adapter.

Deprecated Features

No features have been deprecated as of this release of TIBCO DataSynapse™ High-Performance Computing Cloud Adapter.

Removed Features

No features have been removed as of this release of TIBCO DataSynapse™ High-Performance Computing Cloud Adapter.

Migration and Compatibility

The following information provides migration procedures and a compatibility matrix for this release of TIBCO DataSynapse™ High-Performance Computing Cloud Adapter.

Migrating to Version 2.1.0

Migration to version 2.1.0 from previous versions of DataSynapse™ High-Performance Computing Cloud Adapter (HPCCA) is not supported. For critical functionality or VM Images/AMIs that need to be used, contact TIBCO Support.

Closed Issues

The table lists closed issues since version 1.0.0 of TIBCO DataSynapse™ High-Performance Computing Cloud Adapter.

Version 2.1.0

No issues have been closed in this release of DataSynapse HPCCA.

Version 2.0.0

No issues have been closed in this release of DataSynapse HPCCA.

Version 1.5.0

No issues have been closed in this release of DataSynapse HPCCA.

Version 1.4.0

No issues have been closed in this release of DataSynapse HPCCA.

Version 1.3.0

KEY	SUMMARY
GS-15344	When the GridLibrary Deployer was used without a driver.properties file, it threw a Malformed URL exception. The GridLibrary Deployer has been removed from this release.
GS-13281	A Null Pointer Exception appeared while editing the hook properties within the GridServer Administration tool. The adapter has been modified to fix this issue.

Version 1.2.0

Engine Key Summary

KEY	SUMMARY
GS-13246	The adapter previously updated the /etc/hosts file on Linux Engine VMs. There is no need to do this. By introducing the customizable images and startup scripting (or ARM Templates) the Engine VM is no longer modified by the adapter automatically. If you want to continue to perform this activity, you must include it in User Data or VM Extension scripting.

Version 1.1.0

Key Summary

KEY	SUMMARY
GS-13278	The Director Communication Port was not being set properly on standalone Brokers. A DIRECTORPORT property was created in the cloudprovider.properties file which explicitly sets this value rather than relying on the install.properties.

Known Issues

The following issue exists in this release of TIBCO DataSynapse™ High-Performance Computing Cloud Adapter. Key Summary and Workaround Summary

Key	Description
HPCCA-444	Summary: An unexpected error occurs on DataSynapse GridServer® UI while enabling and disabling the hook from the UI. Workaround: None.

TIBCO Documentation and Support Services

For information about this product, you can read the documentation, contact TIBCO Support, and join TIBCO Community.

How to Access TIBCO Documentation

Documentation for TIBCO products is available on the Product Documentation website, mainly in HTML and PDF formats. The Product Documentation website is updated frequently and is more current than any other documentation included with the product.

Product-Specific Documentation

The following documentation for this product is available on the TIBCO DataSynapse™ High-Performance Computing Cloud Adapter Product Documentation page:

How to Contact Support for TIBCO Products

You can contact the Support team in the following ways:

- To access the Support Knowledge Base and getting personalized content about products you are interested in, visit our product Support website.
- To create a Support case, you must have a valid maintenance or support contract with a Cloud Software Group entity. You also need a username and password to log in to the product Support website. If you do not have a username, you can request one by clicking Register on the website.

How to Join TIBCO Community

TIBCO Community is the official channel for TIBCO customers, partners, and employees subject matter experts to share and access their collective experience. TIBCO Community offers access to Q&A forums, product wikis, and best practices. It also offers access to extensions, adapters, solution accelerators, and tools that extend and enable customers to gain full value from TIBCO products. In addition, users can submit and vote on feature requests from within the TIBCO Ideas Portal. For a free registration, go to TIBCO Community.

Legal and Third-Party Notices

SOME CLOUD SOFTWARE GROUP, INC. ("CLOUD SG") SOFTWARE AND CLOUD SERVICESEMBED, BUNDLE, OR OTHERWISE INCLUDE OTHER SOFTWARE, INCLUDING OTHERCLOUD SG SOFTWARE (COLLECTIVELY, "INCLUDED SOFTWARE"). USE OF INCLUDEDSOFTWARE IS SOLELY TO ENABLE THE FUNCTIONALITY (OR PROVIDE LIMITED ADD-ONFUNCTIONALITY) OF THE LICENSED CLOUD SG SOFTWARE AND/OR CLOUD SERVICES.THE INCLUDED SOFTWARE IS NOT LICENSED TO BE USED OR ACCESSED BY ANYOTHER CLOUD SG SOFTWARE AND/OR CLOUD SERVICES OR FOR ANY OTHERPURPOSE. USE OF CLOUD SG SOFTWARE AND CLOUD SERVICES IS SUBJECT TO THE TERMS ANDCONDITIONS OF AN AGREEMENT FOUND IN EITHER A SEPARATELY EXECUTEDAGREEMENT, OR, IF THERE IS NO SUCH SEPARATE AGREEMENT, THE CLICKWRAP ENDUSER AGREEMENT WHICH IS DISPLAYED WHEN ACCESSING, DOWNLOADING, ORINSTALLING THE SOFTWARE OR CLOUD SERVICES (AND WHICH IS DUPLICATED IN THELICENSE FILE) OR IF THERE IS NO SUCH LICENSE AGREEMENT OR CLICKWRAP ENDUSER AGREEMENT, THE LICENSE(S) LOCATED IN THE "LICENSE" FILE(S) OF THESOFTWARE. USE OF THIS DOCUMENT IS SUBJECT TO THOSE SAME TERMS ANDCONDITIONS, AND YOUR USE HEREOF SHALL CONSTITUTE ACCEPTANCE OF AND ANAGREEMENT TO BE BOUND BY THE SAME. This document is subject to U.S. and international copyright laws and treaties. No part of thisdocument may be reproduced in any form without the written authorization of Cloud SoftwareGroup, Inc. TIBCO, the TIBCO logo, the TIBCO O logo, DataSynapse, GridServer, DataSynapse Federator,FabricBroker, FabricServer, GridClient, LiveCluster, and SpeedLink are either registeredtrademarks or trademarks of Cloud Software Group, Inc. in the United States and/or othercountries. All other product and company names and marks mentioned in this document are the property oftheir respective owners and are mentioned for identification purposes only. You acknowledge thatall rights to these third party marks are the exclusive property of their respective owners. Pleaserefer to Cloud SG's Third Party Trademark Notices (<https://www.cloud.com/legal>) for moreinformation. This document includes fonts that are licensed under the SIL Open Font License, Version 1.1,which is available at: <https://scripts.sil.org/OFL> Copyright (c) Paul D. Hunt, with Reserved Font Name Source Sans Pro and Source Code Pro. Cloud SG software may be available on multiple operating systems. However, not all operatingsystem platforms for a specific software version are released at the same time. See the "readme"file for the availability of a specific version of Cloud SG software on a specific operating systemplatform. THIS DOCUMENT IS PROVIDED "AS IS" WITHOUT WARRANTY OF ANY KIND, EITHEREXPRESS OR IMPLIED, INCLUDING, BUT NOT LIMITED TO, THE IMPLIED WARRANTIES OFMERCHANTABILITY, FITNESS FOR A PARTICULAR PURPOSE, OR NON-INFRINGEMENT. THIS DOCUMENT COULD INCLUDE TECHNICAL INACCURACIES OR TYPOGRAPHICALERRORS. CHANGES ARE PERIODICALLY ADDED TO THE INFORMATION

HEREIN; THESE CHANGES WILL BE INCORPORATED IN NEW EDITIONS OF THIS DOCUMENT. CLOUD SG MAY MAKE IMPROVEMENTS AND/OR CHANGES IN THE PRODUCT(S), THE PROGRAM(S), AND/OR THE SERVICES DESCRIBED IN THIS DOCUMENT AT ANY TIME WITHOUT NOTICE. THE CONTENTS OF THIS DOCUMENT MAY BE MODIFIED AND/OR QUALIFIED, DIRECTLY OR INDIRECTLY, BY OTHER DOCUMENTATION WHICH ACCOMPANIES THIS SOFTWARE, INCLUDING BUT NOT LIMITED TO ANY RELEASE NOTES AND "README" FILES. This and other products of Cloud SG may be covered by registered patents. For details, please refer to the Virtual Patent Marking document located at <https://www.cloud.com/legal>. Copyright © 2001-2024. Cloud Software Group, Inc. All Rights Reserved.

New Features

The following features have been added since the last major release of TIBCO DataSynapse™ High-Performance Computing Cloud Adapter (HPCCA).

Version 2.1.0

Restarting HPCCA TIBCO DataSynapse™ High-Performance Computing Cloud Adapter can now restart, without restarting TIBCO DataSynapse GridServer® Manager for changes in `cloudprovider.properties` file. You must set the `USE_HPPCA_AUTO_RESTART` property present in `cloudprovider.properties` file to true. For more information, see TIBCO DataSynapse™ High-Performance Computing Cloud Adapter User Guide. VM batch termination for GCP By setting `BATCH_VM_TERMINATION` property to true in cloud provider, you can now terminate virtual machines in batch sizes. Park Engine feature for Aggressive Scale Down Using Park Engine feature, you can now mark engine daemon as a candidate to terminate, if busy engine count is less than or equal to `MINIMUM_BUSY_ENGINE`. This is based on value provided in `MINIMUM_BUSY_ENGINE`. For more information, see TIBCO DataSynapse™ High-Performance Computing Cloud Adapter User Guide.

Version 2.0.0

Support for multiple cloud providers DataSynapse HPCCA now supports engines for multiple cloud providers mentioned in the `cloudprovider.properties` file. For more information, see TIBCO DataSynapse™ High-Performance Computing Cloud Adapter User Guide. Aggressive scale down of engines If no task is running on the DataSynapse GridServer® Engine, DataSynapse HPCCA reduces the number of engines irrespective of the `ENGINE_IDLE_TIMEOUT` value. To enable this feature, set the `AGGRESSIVE_SCALEDOWN` property in the `cloudprovider.properties` file to true. For more information, see TIBCO DataSynapse™ High-Performance Computing Cloud Adapter User Guide. Monitoring engines on specific brokers DataSynapse HPCCA now monitors

engines on particular brokers. A list of brokers is provided in the `BROKER_HOSTNAME` property in the `cloudprovider.properties` file. For more information, see TIBCO DataSynapse™ High-Performance Computing CloudAdapter User Guide.

Version 1.5.0

No new features have been added in this release.

Version 1.4.0

Support for Google Cloud Platform Starting from this release, DataSynapse™ High-Performance Computing CloudAdapter (HPCCA) can be configured for Google Cloud Platform (GCP) by using the `cloudprovider.properties` file. For more information, see TIBCO DataSynapse™ High-Performance Computing Cloud Adapter User Guide. Consideration for DataSynapse HPCCA engines for calculating computational need Starting from this release, engines that are not created by DataSynapse HPCCA can be included when calculating computational needs. To enable this feature, set the `CONSIDER_NON_HPCCA_ENGINES` property in the `cloudprovider.properties` file to true. For more information, see TIBCO DataSynapse™ High-Performance Computing CloudAdapter User Guide.

Version 1.3.0

Support for scale sets Scale sets that allow you to create and manage a group of identical, load balanced VMs on Azure are now supported for Windows and Linux 64-bit platforms.

Version 1.2.0

Support for custom images Custom images for both Windows and Linux 64-bit platforms are now supported on AWS and Azure. Support for auto scaling group Autoscaling groups for Windows and Linux 64-bit platforms are now supported on AWS. Grid Library Deployer A new feature to assist in deployment is a TIBCO-supported tool for deploying grid libraries from the command line. The included `GridLibraryDeployer.zip` is a simple Java-based grid library deployment utility based on the `GridLibDeployer.java` class included in the TIBCO DataSynapse GridServer® SDK. Enter `java -jar GridLibraryDeployer.jar` at the command line. A list of options is displayed. Support for SSL-Enabled DataSynapse GridServer® Manager DataSynapse HPCCA can now be installed on SSL-enabled managers. Earlier versions did not support SSL-enabled managers.

Version 1.1.0

Windows engines and initial reconfiguration changes The initial release of the DataSynapse HPCCA only included Linux-based engines. It now supports Windows engines. Also, the

DataSynapse HPCCA now reconfigures an existing DataSynapseGridServer® Engine installation to enable it to connect to the current gridenvironment. This is done rather than the previous method of a fresh install, to enableyou to configure the virtual machine to properly connect into your infrastructure and toenable for the preinstallation of things like grid libraries and caching solutions.

Version 1.0.0

TIBCO DataSynapse™High-Performance Computing Cloud Adapter DataSynapse HPCCA extends the functionality of DataSynapse GridServer® byenabling it to dynamically create virtual machines and provision them with the EngineDaemon. It was created to allow customers to temporarily increase their computecapacity during periods of unusually high load on their DataSynapse GridServer®deployment. The initial release, version 1.0.0, includes Linux 64-bit engines and avery simple cloud management algorithm.

Changes in Functionality

No changes have been made in Functionality as of this release of TIBCODataSynapse™High-Performance Computing Cloud Adapter.

Deprecated Features

No features have been deprecated as of this release of TIBCO DataSynapse™High-Performance Computing Cloud Adapter.

Removed Features

No features have been removed as of this release of TIBCO DataSynapse™High-Performance Computing Cloud Adapter

Migration and Compatibility

The following information provides migration procedures and a compatibility matrix forthis release of TIBCO DataSynapse™High-Performance Computing Cloud Adapter.

Migrating to Version 2.1.0

Migration to version 2.1.0 from previous versions of DataSynapse™High-PerformanceComputing Cloud Adapter (HPCCA) is not supported. For critical functionality or VMImages/AMIs that need to be used, contact TIBCO Support.

Closed Issues

The table lists closed issues since version 1.0.0 of TIBCO DataSynapse™ High-Performance Computing Cloud Adapter.

Version 2.1.0

No issues have been closed in this release of DataSynapse HPCCA.

Version 2.0.0

No issues have been closed in this release of DataSynapse HPCCA.

Version 1.5.0

No issues have been closed in this release of DataSynapse HPCCA.

Version 1.4.0

No issues have been closed in this release of DataSynapse HPCCA.

Version 1.3.0

KEY	SUMMARY
GS-15344	When the GridLibrary Deployer was used without a driver.properties file, it threw aMalformed URL exception. The GridLibrary Deployer has been removed fromthis release.
GS-13281	A Null Pointer Exception appeared while editing the hook properties within theGridServer Administration tool. The adapter has been modified to fix this issue.

Version 1.2.0

Engine Key Summary

KEY	SUMMARY
GS-13246	The adapter previously updated the /etc/hosts file on Linux Engine VMs. There isno need to do this. By introducing the customizable

KEY	SUMMARY
	images and startupscripting (or ARM Templates) the Engine VM is no longer modified by the adapter automatically. If you want to continue to perform this activity, you must include it in User Data or VM Extension scripting.

Version 1.1.0

Key Summary

KEY	SUMMARY
GS-13278	The Director Communication Port was not being set properly on standalone Brokers. A DIRECTORPORT property was created in the cloudprovider.properties file which explicitly sets this value rather than relying on the install.properties.

Known Issues

The following issue exists in this release of TIBCO DataSynapse™ High-Performance Computing Cloud Adapter. Key Summary and Workaround Summary

Key	Description
HPCCA-444	Summary: An unexpected error occurs on DataSynapse GridServer® UI while enabling and disabling the hook from the UI. Workaround: None.

TIBCO Documentation and Support Services

For information about this product, you can read the documentation, contact TIBCO Support, and join TIBCO Community.

How to Access TIBCO Documentation

Documentation for TIBCO products is available on the Product Documentation website, mainly in HTML and PDF formats. The Product Documentation website is updated frequently and is more current than any other documentation included with the product.

Product-Specific Documentation

The following documentation for this product is available on the TIBCO DataSynapse™ High-Performance Computing Cloud Adapter Product Documentation page:

How to Contact Support for TIBCO Products

You can contact the Support team in the following ways:

- To access the Support Knowledge Base and getting personalized content about products you are interested in, visit our product Support website.
- To create a Support case, you must have a valid maintenance or support contract with a Cloud Software Group entity. You also need a username and password to log in to the product Support website. If you do not have a username, you can request one by clicking Register on the website.

How to Join TIBCO Community

TIBCO Community is the official channel for TIBCO customers, partners, and employees subject matter experts to share and access their collective experience. TIBCO Community offers access to Q&A forums, product wikis, and best practices. It also offers access to extensions, adapters, solution accelerators, and tools that extend and enable customers to gain full value from TIBCO products. In addition, users can submit and vote on feature requests from within the TIBCO Ideas Portal. For a free registration, go to TIBCO Community.

Legal and Third-Party Notices

SOME CLOUD SOFTWARE GROUP, INC. ("CLOUD SG") SOFTWARE AND CLOUD SERVICES EMBED, BUNDLE, OR OTHERWISE INCLUDE OTHER SOFTWARE, INCLUDING OTHER CLOUD SG SOFTWARE (COLLECTIVELY, "INCLUDED SOFTWARE"). USE OF INCLUDED SOFTWARE IS SOLELY TO ENABLE THE FUNCTIONALITY (OR PROVIDE LIMITED ADD-ON FUNCTIONALITY) OF THE LICENSED CLOUD SG SOFTWARE AND/OR CLOUD SERVICES. THE INCLUDED SOFTWARE IS NOT LICENSED TO BE USED OR ACCESSED BY ANY OTHER CLOUD SG SOFTWARE AND/OR CLOUD SERVICES OR FOR ANY OTHER PURPOSE. USE OF CLOUD SG SOFTWARE AND CLOUD SERVICES IS SUBJECT TO

THE TERMS AND CONDITIONS OF AN AGREEMENT FOUND IN EITHER A SEPARATELY EXECUTED AGREEMENT, OR, IF THERE IS NO SUCH SEPARATE AGREEMENT, THE CLICKWRAP ENDUSER AGREEMENT WHICH IS DISPLAYED WHEN ACCESSING, DOWNLOADING, OR INSTALLING THE SOFTWARE OR CLOUD SERVICES (AND WHICH IS DUPLICATED IN THE LICENSE FILE) OR IF THERE IS NO SUCH LICENSE AGREEMENT OR CLICKWRAP ENDUSER AGREEMENT, THE LICENSE(S) LOCATED IN THE "LICENSE" FILE(S) OF THE SOFTWARE. USE OF THIS DOCUMENT IS SUBJECT TO THOSE SAME TERMS AND CONDITIONS, AND YOUR USE HEREOF SHALL CONSTITUTE ACCEPTANCE OF AND AN AGREEMENT TO BE BOUND BY THE SAME. This document is subject to U.S. and international copyright laws and treaties. No part of this document may be reproduced in any form without the written authorization of Cloud Software Group, Inc. TIBCO, the TIBCO logo, the TIBCO O logo, DataSynapse, GridServer, DataSynapse Federator, FabricBroker, FabricServer, GridClient, LiveCluster, and SpeedLink are either registered trademarks or trademarks of Cloud Software Group, Inc. in the United States and/or other countries. All other product and company names and marks mentioned in this document are the property of their respective owners and are mentioned for identification purposes only. You acknowledge that all rights to these third party marks are the exclusive property of their respective owners. Please refer to Cloud SG's Third Party Trademark Notices (<https://www.cloud.com/legal>) for more information. This document includes fonts that are licensed under the SIL Open Font License, Version 1.1, which is available at: <https://scripts.sil.org/OFL> Copyright (c) Paul D. Hunt, with Reserved Font Name Source Sans Pro and Source Code Pro. Cloud SG software may be available on multiple operating systems. However, not all operating system platforms for a specific software version are released at the same time. See the "readme" file for the availability of a specific version of Cloud SG software on a specific operating system platform. THIS DOCUMENT IS PROVIDED "AS IS" WITHOUT WARRANTY OF ANY KIND, EITHER EXPRESS OR IMPLIED, INCLUDING, BUT NOT LIMITED TO, THE IMPLIED WARRANTIES OF MERCHANTABILITY, FITNESS FOR A PARTICULAR PURPOSE, OR NON-INFRINGEMENT. THIS DOCUMENT COULD INCLUDE TECHNICAL INACCURACIES OR TYPOGRAPHICAL ERRORS. CHANGES ARE PERIODICALLY ADDED TO THE INFORMATION HEREIN; THESE CHANGES WILL BE INCORPORATED IN NEW EDITIONS OF THIS DOCUMENT. CLOUD SG MAY MAKE IMPROVEMENTS AND/OR CHANGES IN THE PRODUCT(S), THE PROGRAM(S), AND/OR THE SERVICES DESCRIBED IN THIS DOCUMENT AT ANY TIME WITHOUT NOTICE. THE CONTENTS OF THIS DOCUMENT MAY BE MODIFIED AND/OR QUALIFIED, DIRECTLY OR INDIRECTLY, BY OTHER DOCUMENTATION WHICH ACCOMPANIES THIS SOFTWARE, INCLUDING BUT NOT LIMITED TO ANY RELEASE NOTES AND "README" FILES. This and other products of Cloud SG may be covered by registered patents. For details, please refer to the Virtual Patent Marking document located at <https://www.cloud.com/legal>. Copyright © 2001-2024. Cloud Software Group, Inc. All Rights Reserved.

New Features

The following features have been added since the last major release of TIBCODataSynapse™High-Performance Computing Cloud Adapter (HPCCA).

Version 2.1.0

Restarting HPCCA TIBCO DataSynapse™High-Performance Computing Cloud Adapter can now restart,without restarting TIBCO DataSynapse GridServer® Manager for changes incloudprovider.properties file. You must set the USE_HPPCA_AUTO_RESTARTproperty present in cloudprovider.properties file to true. For more information, seeTIBCO DataSynapse™High-Performance Computing Cloud Adapter User Guide. VM batch termination for GCP By setting BATCH_VM_TERMINATION property to true in cloud provider, you cannow terminate virtual machines in batch sizes. Park Engine feature for Aggressive Scale Down Using Park Engine feature, you can now mark engine daemon as a candidate toterminate, if busy engine count is less than or equal to MINIMUM_BUSY_ENGINE.This is based on value provided in MINIMUM_BUSY_ENGINE. For more information,see TIBCO DataSynapse™High-Performance Computing Cloud Adapter User Guide.

Version 2.0.0

Support for multiple cloud providers DataSynapse HPCCA now supports engines for multiple cloud providers mentionedin the cloudprovider.properties file. For more information, see TIBCO DataSynapse™High-Performance Computing Cloud Adapter User Guide. Aggressive scale down of engines If no task is running on the DataSynapse GridServer® Engine, DataSynapse HPCCAreduces the number of engines irrespective of the ENGINEIDLETIMEOUT value. Toenable this feature, set the AGGRESSIVE_SCALEDOWN property in the cloudprovider.properties file to true. For more information, see TIBCO DataSynapse™High-Performance Computing Cloud Adapter User Guide. Monitoring engines on specific brokers DataSynapse HPCCA now monitors engines on particular brokers. A list of brokers isprovided in the BROKER_HOSTNAME property in the cloudprovider.properties file. Formore information, see TIBCO DataSynapse™High-Performance Computing CloudAdapter User Guide.

Version 1.5.0

No new features have been added in this release.

Version 1.4.0

Support for Google Cloud Platform Starting from this release, DataSynapse™High-Performance Computing CloudAdapter (HPCCA) can be configured for Google Cloud Platform (GCP) by using

the `cloudprovider.properties` file. For more information, see TIBCO DataSynapse™ High-Performance Computing Cloud Adapter User Guide. Consideration for DataSynapse HPCCA engines for calculating computational need Starting from this release, engines that are not created by DataSynapse HPCCA can be included when calculating computational needs. To enable this feature, set the `CONSIDER_NON_HPCCA_ENGINES` property in the `cloudprovider.properties` file to true. For more information, see TIBCO DataSynapse™ High-Performance Computing Cloud Adapter User Guide.

Version 1.3.0

Support for scale sets Scale sets that allow you to create and manage a group of identical, load balanced VMs on Azure are now supported for Windows and Linux 64-bit platforms.

Version 1.2.0

Support for custom images Custom images for both Windows and Linux 64-bit platforms are now supported on AWS and Azure. Support for auto scaling group Autoscaling groups for Windows and Linux 64-bit platforms are now supported on AWS. Grid Library Deployer A new feature to assist in deployment is a TIBCO-supported tool for deploying grid libraries from the command line. The included `GridLibraryDeployer.zip` is a simple Java-based grid library deployment utility based on the `GridLibDeployer.java` class included in the TIBCO DataSynapse GridServer® SDK. Enter `java -jar GridLibraryDeployer.jar` at the command line. A list of options is displayed. Support for SSL-Enabled DataSynapse GridServer® Manager DataSynapse HPCCA can now be installed on SSL-enabled managers. Earlier versions did not support SSL-enabled managers.

Version 1.1.0

Windows engines and initial reconfiguration changes The initial release of the DataSynapse HPCCA only included Linux-based engines. It now supports Windows engines. Also, the DataSynapse HPCCA now reconfigures an existing DataSynapse GridServer® Engine installation to enable it to connect to the current grid environment. This is done rather than the previous method of a fresh install, to enable you to configure the virtual machine to properly connect into your infrastructure and to enable for the preinstallation of things like grid libraries and caching solutions.

Version 1.0.0

TIBCO DataSynapse™ High-Performance Computing Cloud Adapter DataSynapse HPCCA extends the functionality of DataSynapse GridServer® by enabling it to dynamically create virtual machines and provision them with the Engine Daemon. It was created to allow customers to temporarily increase their compute capacity during periods of unusually high load on their

DataSynapse GridServer® deployment. The initial release, version 1.0.0, includes Linux 64-bit engines and a very simple cloud management algorithm.

Changes in Functionality

No changes have been made in Functionality as of this release of TIBCO DataSynapse™ High-Performance Computing Cloud Adapter.

Deprecated Features

No features have been deprecated as of this release of TIBCO DataSynapse™ High-Performance Computing Cloud Adapter.

Removed Features

No features have been removed as of this release of TIBCO DataSynapse™ High-Performance Computing Cloud Adapter.

Migration and Compatibility

The following information provides migration procedures and a compatibility matrix for this release of TIBCO DataSynapse™ High-Performance Computing Cloud Adapter.

Migrating to Version 2.1.0

Migration to version 2.1.0 from previous versions of DataSynapse™ High-Performance Computing Cloud Adapter (HPCCA) is not supported. For critical functionality or VM Images/AMIs that need to be used, contact TIBCO Support.

Closed Issues

The table lists closed issues since version 1.0.0 of TIBCO DataSynapse™ High-Performance Computing Cloud Adapter.

Version 2.1.0

No issues have been closed in this release of DataSynapse HPCCA.

Version 2.0.0

No issues have been closed in this release of DataSynapse HPCCA.

Version 1.5.0

No issues have been closed in this release of DataSynapse HPCCA.

Version 1.4.0

No issues have been closed in this release of DataSynapse HPCCA.

Version 1.3.0

KEY	SUMMARY
GS-15344	When the GridLibrary Deployer was used without a driver.properties file, it threw aMalformed URL exception. The GridLibrary Deployer has been removed fromthis release.
GS-13281	A Null Pointer Exception appeared while editing the hook properties within theGridServer Administration tool. The adapter has been modified to fix this issue.

Version 1.2.0

Engine Key Summary

KEY	SUMMARY
GS-13246	The adapter previously updated the /etc/hosts file on Linux Engine VMs. There isno need to do this. By introducing the customizable images and startupscripting (or ARM Templates) the Engine VM is no longer modified by theadapter automatically. If you want to continue to perform this activity, you mustinclude it in User Data or VM Extension scripting.

Version 1.1.0

Key Summary

KEY	SUMMARY
GS-13278	The Director Communication Port was not being set properly on standaloneBrokers. A DIRECTORPORT property was created in the cloudprovider.properties filewhich explicitly sets this value rather than relying on the install.properties.

Known Issues

The following issue exists in this release of TIBCO DataSynapse™High-PerformanceComputing Cloud Adapter. Key Summary and Workaround Summary

Key	Description
HPCCA-444	Summary: An unexpected error occurs on DataSynapse GridServer® UI whileenabling and disabling the hook from the UI. Workaround: None.

TIBCO Documentation and SupportServices

For information about this product, you can read the documentation, contact TIBCOsupport, and join TIBCO Community.

How to Access TIBCO Documentation

Documentation for TIBCO products is available on the Product Documentation website,mainly in HTML and PDF formats. The Product Documentation website is updated frequently and is more current than anyother documentation included with the product.

Product-Specific Documentation

The following documentation for this product is available on the TIBCO DataSynapse™High-Performance Computing Cloud Adapter Product Documentation page:

How to Contact Support for TIBCO Products

You can contact the Support team in the following ways:

- To access the Support Knowledge Base and getting personalized content about products you are interested in, visit our product Support website.
- To create a Support case, you must have a valid maintenance or support contract with a Cloud Software Group entity. You also need a username and password to log in to the product Support website. If you do not have a username, you can request one by clicking Register on the website.

How to Join TIBCO Community

TIBCO Community is the official channel for TIBCO customers, partners, and employees subject matter experts to share and access their collective experience. TIBCO Community offers access to Q&A forums, product wikis, and best practices. It also offers access to extensions, adapters, solution accelerators, and tools that extend and enable customers to gain full value from TIBCO products. In addition, users can submit and vote on feature requests from within the TIBCO Ideas Portal. For a free registration, go to [TIBCO Community](#).

Legal and Third-Party Notices

SOME CLOUD SOFTWARE GROUP, INC. ("CLOUD SG") SOFTWARE AND CLOUD SERVICES EMBED, BUNDLE, OR OTHERWISE INCLUDE OTHER SOFTWARE, INCLUDING OTHER CLOUD SG SOFTWARE (COLLECTIVELY, "INCLUDED SOFTWARE"). USE OF INCLUDED SOFTWARE IS SOLELY TO ENABLE THE FUNCTIONALITY (OR PROVIDE LIMITED ADD-ON FUNCTIONALITY) OF THE LICENSED CLOUD SG SOFTWARE AND/OR CLOUD SERVICES. THE INCLUDED SOFTWARE IS NOT LICENSED TO BE USED OR ACCESSED BY ANY OTHER CLOUD SG SOFTWARE AND/OR CLOUD SERVICES OR FOR ANY OTHER PURPOSE. USE OF CLOUD SG SOFTWARE AND CLOUD SERVICES IS SUBJECT TO THE TERMS AND CONDITIONS OF AN AGREEMENT FOUND IN EITHER A SEPARATELY EXECUTED AGREEMENT, OR, IF THERE IS NO SUCH SEPARATE AGREEMENT, THE CLICKWRAP END USER AGREEMENT WHICH IS DISPLAYED WHEN ACCESSING, DOWNLOADING, OR INSTALLING THE SOFTWARE OR CLOUD SERVICES (AND WHICH IS DUPLICATED IN THE LICENSE FILE) OR IF THERE IS NO SUCH LICENSE AGREEMENT OR CLICKWRAP END USER AGREEMENT, THE LICENSE(S) LOCATED IN THE "LICENSE" FILE(S) OF THE SOFTWARE. USE OF THIS DOCUMENT IS SUBJECT TO THOSE SAME TERMS AND CONDITIONS, AND YOUR USE HEREOF SHALL CONSTITUTE ACCEPTANCE OF AND AN AGREEMENT TO BE BOUND BY THE SAME. This document is subject to U.S. and international copyright laws and treaties. No part of this document may be reproduced in any form without the written authorization of Cloud Software Group, Inc. TIBCO, the TIBCO logo, the TIBCO O logo, DataSynapse, GridServer, DataSynapse Federator, FabricBroker, FabricServer, GridClient, LiveCluster, and SpeedLink are either registered trademarks or trademarks of Cloud Software

Group, Inc. in the United States and/or other countries. All other product and company names and marks mentioned in this document are the property of their respective owners and are mentioned for identification purposes only. You acknowledge that all rights to these third party marks are the exclusive property of their respective owners. Please refer to Cloud SG's Third Party Trademark Notices (<https://www.cloud.com/legal>) for more information. This document includes fonts that are licensed under the SIL Open Font License, Version 1.1, which is available at: <https://scripts.sil.org/OFL> Copyright (c) Paul D. Hunt, with Reserved Font Name Source Sans Pro and Source Code Pro. Cloud SG software may be available on multiple operating systems. However, not all operating system platforms for a specific software version are released at the same time. See the "readme" file for the availability of a specific version of Cloud SG software on a specific operating system platform. THIS DOCUMENT IS PROVIDED "AS IS" WITHOUT WARRANTY OF ANY KIND, EITHER EXPRESS OR IMPLIED, INCLUDING, BUT NOT LIMITED TO, THE IMPLIED WARRANTIES OF MERCHANTABILITY, FITNESS FOR A PARTICULAR PURPOSE, OR NON-INFRINGEMENT. THIS DOCUMENT COULD INCLUDE TECHNICAL INACCURACIES OR TYPOGRAPHICAL ERRORS. CHANGES ARE PERIODICALLY ADDED TO THE INFORMATION HEREIN; THESE CHANGES WILL BE INCORPORATED IN NEW EDITIONS OF THIS DOCUMENT. CLOUD SG MAY MAKE IMPROVEMENTS AND/OR CHANGES IN THE PRODUCT(S), THE PROGRAM(S), AND/OR THE SERVICES DESCRIBED IN THIS DOCUMENT AT ANY TIME WITHOUT NOTICE. THE CONTENTS OF THIS DOCUMENT MAY BE MODIFIED AND/OR QUALIFIED, DIRECTLY OR INDIRECTLY, BY OTHER DOCUMENTATION WHICH ACCOMPANIES THIS SOFTWARE, INCLUDING BUT NOT LIMITED TO ANY RELEASE NOTES AND "README" FILES. This and other products of Cloud SG may be covered by registered patents. For details, please refer to the Virtual Patent Marking document located at <https://www.cloud.com/legal>. Copyright © 2001-2024. Cloud Software Group, Inc. All Rights Reserved.

New Features

The following features have been added since the last major release of TIBCO DataSynapse™ High-Performance Computing Cloud Adapter (HPCCA).

Version 2.1.0

Restarting HPCCA TIBCO DataSynapse™ High-Performance Computing Cloud Adapter can now restart, without restarting TIBCO DataSynapse GridServer® Manager for changes in `cloudprovider.properties` file. You must set the `USE_HPPCA_AUTO_RESTART` property present in `cloudprovider.properties` file to true. For more information, see TIBCO DataSynapse™ High-Performance Computing Cloud Adapter User Guide. VM batch termination for GCP By setting `BATCH_VM_TERMINATION` property to true in cloud provider, you can now terminate virtual

machines in batch sizes. Park Engine feature for Aggressive Scale Down Using Park Engine feature, you can now mark engine daemon as a candidate to terminate, if busy engine count is less than or equal to `MINIMUM_BUSY_ENGINE`. This is based on value provided in `MINIMUM_BUSY_ENGINE`. For more information, see TIBCO DataSynapse™ High-Performance Computing Cloud Adapter User Guide.

Version 2.0.0

Support for multiple cloud providers DataSynapse HPCCA now supports engines for multiple cloud providers mentioned in the `cloudprovider.properties` file. For more information, see TIBCO DataSynapse™ High-Performance Computing Cloud Adapter User Guide. Aggressive scale down of engines If no task is running on the DataSynapse GridServer® Engine, DataSynapse HPCCA reduces the number of engines irrespective of the `ENGINEIDLETIMEOUT` value. To enable this feature, set the `AGGRESSIVE_SCALEDOWN` property in the `cloudprovider.properties` file to true. For more information, see TIBCO DataSynapse™ High-Performance Computing Cloud Adapter User Guide. Monitoring engines on specific brokers DataSynapse HPCCA now monitors engines on particular brokers. A list of brokers is provided in the `BROKER_HOSTNAME` property in the `cloudprovider.properties` file. For more information, see TIBCO DataSynapse™ High-Performance Computing Cloud Adapter User Guide.

Version 1.5.0

No new features have been added in this release.

Version 1.4.0

Support for Google Cloud Platform Starting from this release, DataSynapse™ High-Performance Computing Cloud Adapter (HPCCA) can be configured for Google Cloud Platform (GCP) by using the `cloudprovider.properties` file. For more information, see TIBCO DataSynapse™ High-Performance Computing Cloud Adapter User Guide. Consideration for DataSynapse HPCCA engines for calculating computational need Starting from this release, engines that are not created by DataSynapse HPCCA can be included when calculating computational needs. To enable this feature, set the `CONSIDER_NON_HPCCA_ENGINES` property in the `cloudprovider.properties` file to true. For more information, see TIBCO DataSynapse™ High-Performance Computing Cloud Adapter User Guide.

Version 1.3.0

Support for scale sets Scale sets that allow you to create and manage a group of identical, load balanced VMs on Azure are now supported for Windows and Linux 64-bit platforms.

Version 1.2.0

Support for custom images Custom images for both Windows and Linux 64-bit platforms are now supported on AWS and Azure. Support for auto scaling group Autoscaling groups for Windows and Linux 64-bit platforms are now supported on AWS. Grid Library Deployer A new feature to assist in deployment is a TIBCO-supported tool for deploying grid libraries from the command line. The included GridLibraryDeployer.zip is a simple Java-based grid library deployment utility based on the GridLibDeployer.java class included in the TIBCO DataSynapse GridServer® SDK. Enter `java -jar GridLibraryDeployer.jar` at the command line. A list of options is displayed. Support for SSL-Enabled DataSynapse GridServer® Manager DataSynapse HPCCA can now be installed on SSL-enabled managers. Earlier versions did not support SSL-enabled managers.

Version 1.1.0

Windows engines and initial reconfiguration changes The initial release of the DataSynapse HPCCA only included Linux-based engines. It now supports Windows engines. Also, the DataSynapse HPCCA now reconfigures an existing DataSynapse GridServer® Engine installation to enable it to connect to the current grid environment. This is done rather than the previous method of a fresh install, to enable you to configure the virtual machine to properly connect into your infrastructure and to enable for the preinstallation of things like grid libraries and caching solutions.

Version 1.0.0

TIBCO DataSynapse™ High-Performance Computing Cloud Adapter DataSynapse HPCCA extends the functionality of DataSynapse GridServer® by enabling it to dynamically create virtual machines and provision them with the EngineDaemon. It was created to allow customers to temporarily increase their compute capacity during periods of unusually high load on their DataSynapse GridServer® deployment. The initial release, version 1.0.0, includes Linux 64-bit engines and a very simple cloud management algorithm.

Changes in Functionality

No changes have been made in Functionality as of this release of TIBCO DataSynapse™ High-Performance Computing Cloud Adapter.

Deprecated Features

No features have been deprecated as of this release of TIBCO DataSynapse™ High-Performance Computing Cloud Adapter.

Removed Features

No features have been removed as of this release of TIBCO DataSynapse™High-Performance Computing Cloud Adapter

Migration and Compatibility

The following information provides migration procedures and a compatibility matrix for this release of TIBCO DataSynapse™High-Performance Computing Cloud Adapter.

Migrating to Version 2.1.0

Migration to version 2.1.0 from previous versions of DataSynapse™High-Performance Computing Cloud Adapter (HPCCA) is not supported. For critical functionality or VMImages/AMIs that need to be used, contact TIBCO Support.

Closed Issues

The table lists closed issues since version 1.0.0 of TIBCO DataSynapse™High-Performance Computing Cloud Adapter.

Version 2.1.0

No issues have been closed in this release of DataSynapse HPCCA.

Version 2.0.0

No issues have been closed in this release of DataSynapse HPCCA.

Version 1.5.0

No issues have been closed in this release of DataSynapse HPCCA.

Version 1.4.0

No issues have been closed in this release of DataSynapse HPCCA.

Version 1.3.0

KEY	SUMMARY
GS-15344	When the GridLibrary Deployer was used without a driver.properties file, it threw

KEY	SUMMARY
	aMalformed URL exception. The GridLibrary Deployer has been removed from this release.
GS-13281	A Null Pointer Exception appeared while editing the hook properties within the GridServer Administration tool. The adapter has been modified to fix this issue.

Version 1.2.0

Engine Key Summary

KEY	SUMMARY
GS-13246	The adapter previously updated the /etc/hosts file on Linux Engine VMs. There is no need to do this. By introducing the customizable images and startup scripting (or ARM Templates) the Engine VM is no longer modified by the adapter automatically. If you want to continue to perform this activity, you must include it in User Data or VM Extension scripting.

Version 1.1.0

Key Summary

KEY	SUMMARY
GS-13278	The Director Communication Port was not being set properly on standalone Brokers. A DIRECTORPORT property was created in the cloudprovider.properties file which explicitly sets this value rather than relying on the install.properties.

Known Issues

The following issue exists in this release of TIBCO DataSynapse™ High-Performance Computing Cloud Adapter. Key Summary and Workaround Summary

Key	Description
HPCCA-444	Summary: An unexpected error occurs on DataSynapse GridServer® UI while enabling and disabling the hook from the UI. Workaround: None.

TIBCO Documentation and Support Services

For information about this product, you can read the documentation, contact TIBCO Support, and join TIBCO Community.

How to Access TIBCO Documentation

Documentation for TIBCO products is available on the Product Documentation website, mainly in HTML and PDF formats. The Product Documentation website is updated frequently and is more current than any other documentation included with the product.

Product-Specific Documentation

The following documentation for this product is available on the TIBCO DataSynapse™ High-Performance Computing Cloud Adapter Product Documentation page:

How to Contact Support for TIBCO Products

You can contact the Support team in the following ways:

- To access the Support Knowledge Base and getting personalized content about products you are interested in, visit our product Support website.
- To create a Support case, you must have a valid maintenance or support contract with a Cloud Software Group entity. You also need a username and password to log in to the product Support website. If you do not have a username, you can request one by clicking Register on the website.

How to Join TIBCO Community

TIBCO Community is the official channel for TIBCO customers, partners, and employeesubject matter experts to share and access their collective experience. TIBCOCommunity offers access to Q&A forums, product wikis, and best practices. It also offersaccess to extensions, adapters, solution accelerators, and tools that extend and enable customers to gain full value from TIBCO products. In addition, users can submit and voteon feature requests from within the TIBCO Ideas Portal. For a free registration, go toTIBCO Community.

Legal and Third-Party Notices

SOME CLOUD SOFTWARE GROUP, INC. ("CLOUD SG") SOFTWARE AND CLOUD SERVICESEMBED, BUNDLE, OR OTHERWISE INCLUDE OTHER SOFTWARE, INCLUDING OTHERCLOUD SG SOFTWARE (COLLECTIVELY, "INCLUDED SOFTWARE"). USE OF INCLUDEDSOFTWARE IS SOLELY TO ENABLE THE FUNCTIONALITY (OR PROVIDE LIMITED ADD-ONFUNCTIONALITY) OF THE LICENSED CLOUD SG SOFTWARE AND/OR CLOUD SERVICES.THE INCLUDED SOFTWARE IS NOT LICENSED TO BE USED OR ACCESSED BY ANYOTHER CLOUD SG SOFTWARE AND/OR CLOUD SERVICES OR FOR ANY OTHERPURPOSE. USE OF CLOUD SG SOFTWARE AND CLOUD SERVICES IS SUBJECT TO THE TERMS ANDCONDITIONS OF AN AGREEMENT FOUND IN EITHER A SEPARATELY EXECUTEDAGREEMENT, OR, IF THERE IS NO SUCH SEPARATE AGREEMENT, THE CLICKWRAP ENDUSER AGREEMENT WHICH IS DISPLAYED WHEN ACCESSING, DOWNLOADING, ORINSTALLING THE SOFTWARE OR CLOUD SERVICES (AND WHICH IS DUPLICATED IN THELICENSE FILE) OR IF THERE IS NO SUCH LICENSE AGREEMENT OR CLICKWRAP ENDUSER AGREEMENT, THE LICENSE(S) LOCATED IN THE "LICENSE" FILE(S) OF THESOFTWARE. USE OF THIS DOCUMENT IS SUBJECT TO THOSE SAME TERMS ANDCONDITIONS, AND YOUR USE HEREOF SHALL CONSTITUTE ACCEPTANCE OF AND ANAGREEMENT TO BE BOUND BY THE SAME. This document is subject to U.S. and international copyright laws and treaties. No part of thisdocument may be reproduced in any form without the written authorization of Cloud SoftwareGroup, Inc. TIBCO, the TIBCO logo, the TIBCO O logo, DataSynapse, GridServer, DataSynapse Federator,FabricBroker, FabricServer, GridClient, LiveCluster, and SpeedLink are either registeredtrademarks or trademarks of Cloud Software Group, Inc. in the United States and/or othercountries. All other product and company names and marks mentioned in this document are the property oftheir respective owners and are mentioned for identification purposes only. You acknowledge thatall rights to these third party marks are the exclusive property of their respective owners. Pleaserefer to Cloud SG's Third Party Trademark Notices (<https://www.cloud.com/legal>) for moreinformation. This document includes fonts that are licensed under the SIL Open Font License, Version 1.1,which is available at: <https://scripts.sil.org/OFL> Copyright (c) Paul D. Hunt, with Reserved Font Name Source Sans Pro and Source Code

Pro. Cloud SG software may be available on multiple operating systems. However, not all operating system platforms for a specific software version are released at the same time. See the “readme” file for the availability of a specific version of Cloud SG software on a specific operating system platform. THIS DOCUMENT IS PROVIDED “AS IS” WITHOUT WARRANTY OF ANY KIND, EITHER EXPRESS OR IMPLIED, INCLUDING, BUT NOT LIMITED TO, THE IMPLIED WARRANTIES OF MERCHANTABILITY, FITNESS FOR A PARTICULAR PURPOSE, OR NON-INFRINGEMENT. THIS DOCUMENT COULD INCLUDE TECHNICAL INACCURACIES OR TYPOGRAPHICAL ERRORS. CHANGES ARE PERIODICALLY ADDED TO THE INFORMATION HEREIN; THESE CHANGES WILL BE INCORPORATED IN NEW EDITIONS OF THIS DOCUMENT. CLOUD SG MAY MAKE IMPROVEMENTS AND/OR CHANGES IN THE PRODUCT(S), THE PROGRAM(S), AND/OR THE SERVICES DESCRIBED IN THIS DOCUMENT AT ANY TIME WITHOUT NOTICE. THE CONTENTS OF THIS DOCUMENT MAY BE MODIFIED AND/OR QUALIFIED, DIRECTLY OR INDIRECTLY, BY OTHER DOCUMENTATION WHICH ACCOMPANIES THIS SOFTWARE, INCLUDING BUT NOT LIMITED TO ANY RELEASE NOTES AND “README” FILES. This and other products of Cloud SG may be covered by registered patents. For details, please refer to the Virtual Patent Marking document located at <https://www.cloud.com/legal>. Copyright © 2001-2024. Cloud Software Group, Inc. All Rights Reserved.

New Features

The following features have been added since the last major release of TIBCO DataSynapse™ High-Performance Computing Cloud Adapter (HPCCA).

Version 2.1.0

Restarting HPCCA TIBCO DataSynapse™ High-Performance Computing Cloud Adapter can now restart, without restarting TIBCO DataSynapse GridServer® Manager for changes in `cloudprovider.properties` file. You must set the `USE_HPPCA_AUTO_RESTART` property present in `cloudprovider.properties` file to true. For more information, see TIBCO DataSynapse™ High-Performance Computing Cloud Adapter User Guide. VM batch termination for GCP By setting `BATCH_VM_TERMINATION` property to true in cloud provider, you can now terminate virtual machines in batch sizes. Park Engine feature for Aggressive Scale Down Using Park Engine feature, you can now mark engine daemon as a candidate to terminate, if busy engine count is less than or equal to `MINIMUM_BUSY_ENGINE`. This is based on value provided in `MINIMUM_BUSY_ENGINE`. For more information, see TIBCO DataSynapse™ High-Performance Computing Cloud Adapter User Guide.

Version 2.0.0

Support for multiple cloud providers DataSynapse HPCCA now supports engines for multiple cloud providers mentioned in the `cloudprovider.properties` file. For more information, see TIBCO DataSynapse™ High-Performance Computing Cloud Adapter User Guide. Aggressive scale down of engines If no task is running on the DataSynapse GridServer® Engine, DataSynapse HPCCA reduces the number of engines irrespective of the `ENGINEIDLETIMEOUT` value. To enable this feature, set the `AGGRESSIVE_SCALEDOWN` property in the `cloudprovider.properties` file to true. For more information, see TIBCO DataSynapse™ High-Performance Computing Cloud Adapter User Guide. Monitoring engines on specific brokers DataSynapse HPCCA now monitors engines on particular brokers. A list of brokers is provided in the `BROKER_HOSTNAME` property in the `cloudprovider.properties` file. For more information, see TIBCO DataSynapse™ High-Performance Computing Cloud Adapter User Guide.

Version 1.5.0

No new features have been added in this release.

Version 1.4.0

Support for Google Cloud Platform Starting from this release, DataSynapse™ High-Performance Computing Cloud Adapter (HPCCA) can be configured for Google Cloud Platform (GCP) by using the `cloudprovider.properties` file. For more information, see TIBCO DataSynapse™ High-Performance Computing Cloud Adapter User Guide. Consideration for DataSynapse HPCCA engines for calculating computational need Starting from this release, engines that are not created by DataSynapse HPCCA can be included when calculating computational needs. To enable this feature, set the `CONSIDER_NON_HPCCA_ENGINES` property in the `cloudprovider.properties` file to true. For more information, see TIBCO DataSynapse™ High-Performance Computing Cloud Adapter User Guide.

Version 1.3.0

Support for scale sets Scale sets that allow you to create and manage a group of identical, load balanced VMs on Azure are now supported for Windows and Linux 64-bit platforms.

Version 1.2.0

Support for custom images Custom images for both Windows and Linux 64-bit platforms are now supported on AWS and Azure. Support for auto scaling group Autoscaling groups for Windows and Linux 64-bit platforms are now supported on AWS. Grid Library Deployer A new feature to assist in deployment is a TIBCO-supported tool for deploying grid libraries from the command line. The

included GridLibraryDeployer.zip is a simple Java-based grid library deployment utility based on the GridLibDeployer.java class included in the TIBCO DataSynapse GridServer® SDK. Enter `java -jar GridLibraryDeployer.jar` at the command line. A list of options is displayed. Support for SSL-Enabled DataSynapse GridServer® Manager DataSynapse HPCCA can now be installed on SSL-enabled managers. Earlier versions did not support SSL-enabled managers.

Version 1.1.0

Windows engines and initial reconfiguration changes The initial release of the DataSynapse HPCCA only included Linux-based engines. It now supports Windows engines. Also, the DataSynapse HPCCA now reconfigures an existing DataSynapse GridServer® Engine installation to enable it to connect to the current grid environment. This is done rather than the previous method of a fresh install, to enable you to configure the virtual machine to properly connect into your infrastructure and to enable for the preinstallation of things like grid libraries and caching solutions.

Version 1.0.0

TIBCO DataSynapse™ High-Performance Computing Cloud Adapter DataSynapse HPCCA extends the functionality of DataSynapse GridServer® by enabling it to dynamically create virtual machines and provision them with the EngineDaemon. It was created to allow customers to temporarily increase their compute capacity during periods of unusually high load on their DataSynapse GridServer® deployment. The initial release, version 1.0.0, includes Linux 64-bit engines and a very simple cloud management algorithm.

Changes in Functionality

No changes have been made in Functionality as of this release of TIBCO DataSynapse™ High-Performance Computing Cloud Adapter.

Deprecated Features

No features have been deprecated as of this release of TIBCO DataSynapse™ High-Performance Computing Cloud Adapter.

Removed Features

No features have been removed as of this release of TIBCO DataSynapse™ High-Performance Computing Cloud Adapter

Migration and Compatibility

The following information provides migration procedures and a compatibility matrix for this release of TIBCO DataSynapse™ High-Performance Computing Cloud Adapter.

Migrating to Version 2.1.0

Migration to version 2.1.0 from previous versions of DataSynapse™ High-Performance Computing Cloud Adapter (HPCCA) is not supported. For critical functionality or VM Images/AMIs that need to be used, contact TIBCO Support.

Closed Issues

The table lists closed issues since version 1.0.0 of TIBCO DataSynapse™ High-Performance Computing Cloud Adapter.

Version 2.1.0

No issues have been closed in this release of DataSynapse HPCCA.

Version 2.0.0

No issues have been closed in this release of DataSynapse HPCCA.

Version 1.5.0

No issues have been closed in this release of DataSynapse HPCCA.

Version 1.4.0

No issues have been closed in this release of DataSynapse HPCCA.

Version 1.3.0

KEY	SUMMARY
GS-15344	When the GridLibrary Deployer was used without a driver.properties file, it threw a Malformed URL exception. The GridLibrary Deployer has been removed from this release.
GS-13281	A Null Pointer Exception appeared while editing the hook properties within

KEY	SUMMARY
	theGridServer Administration tool. The adapter has been modified to fix this issue.

Version 1.2.0

Engine Key Summary

KEY	SUMMARY
GS-13246	The adapter previously updated the /etc/hosts file on Linux Engine VMs. There is no need to do this. By introducing the customizable images and startup scripting (or ARM Templates) the Engine VM is no longer modified by the adapter automatically. If you want to continue to perform this activity, you must include it in User Data or VM Extension scripting.

Version 1.1.0

Key Summary

KEY	SUMMARY
GS-13278	The Director Communication Port was not being set properly on standalone Brokers. A DIRECTORPORT property was created in the cloudprovider.properties file which explicitly sets this value rather than relying on the install.properties.

Known Issues

The following issue exists in this release of TIBCO DataSynapse™ High-Performance Computing Cloud Adapter. Key Summary and Workaround Summary

Key	Description
-----	-------------

HPCCA-444

Summary: An unexpected error occurs on DataSynapse GridServer® UI while enabling and disabling the hook from the UI.

Workaround: None.

TIBCO Documentation and Support Services

For information about this product, you can read the documentation, contact TIBCO Support, and join TIBCO Community.

How to Access TIBCO Documentation

Documentation for TIBCO products is available on the Product Documentation website, mainly in HTML and PDF formats. The Product Documentation website is updated frequently and is more current than any other documentation included with the product.

Product-Specific Documentation

The following documentation for this product is available on the TIBCO DataSynapse™ High-Performance Computing Cloud Adapter Product Documentation page:

How to Contact Support for TIBCO Products

You can contact the Support team in the following ways:

- To access the Support Knowledge Base and getting personalized content about products you are interested in, visit our product Support website.
- To create a Support case, you must have a valid maintenance or support contract with a Cloud Software Group entity. You also need a username and password to log in to the product Support website. If you do not have a username, you can request one by clicking Register on the website.

How to Join TIBCO Community

TIBCO Community is the official channel for TIBCO customers, partners, and employees subject matter experts to share and access their collective experience. TIBCO Community offers access to Q&A forums, product wikis, and best practices. It also offers access to extensions, adapters, solution accelerators, and tools that extend and enable customers to gain full value from TIBCO products. In addition, users can submit and vote on feature requests from within the TIBCO Ideas Portal. For a free registration, go to TIBCO Community.

Legal and Third-Party Notices

SOME CLOUD SOFTWARE GROUP, INC. ("CLOUD SG") SOFTWARE AND CLOUD SERVICES EMBED, BUNDLE, OR OTHERWISE INCLUDE OTHER SOFTWARE, INCLUDING OTHER CLOUD SG SOFTWARE (COLLECTIVELY, "INCLUDED SOFTWARE"). USE OF INCLUDED SOFTWARE IS SOLELY TO ENABLE THE FUNCTIONALITY (OR PROVIDE LIMITED ADD-ON FUNCTIONALITY) OF THE LICENSED CLOUD SG SOFTWARE AND/OR CLOUD SERVICES. THE INCLUDED SOFTWARE IS NOT LICENSED TO BE USED OR ACCESSED BY ANY OTHER CLOUD SG SOFTWARE AND/OR CLOUD SERVICES OR FOR ANY OTHER PURPOSE. USE OF CLOUD SG SOFTWARE AND CLOUD SERVICES IS SUBJECT TO THE TERMS AND CONDITIONS OF AN AGREEMENT FOUND IN EITHER A SEPARATELY EXECUTED AGREEMENT, OR, IF THERE IS NO SUCH SEPARATE AGREEMENT, THE CLICKWRAP ENDUSER AGREEMENT WHICH IS DISPLAYED WHEN ACCESSING, DOWNLOADING, OR INSTALLING THE SOFTWARE OR CLOUD SERVICES (AND WHICH IS DUPLICATED IN THE LICENSE FILE) OR IF THERE IS NO SUCH LICENSE AGREEMENT OR CLICKWRAP ENDUSER AGREEMENT, THE LICENSE(S) LOCATED IN THE "LICENSE" FILE(S) OF THE SOFTWARE. USE OF THIS DOCUMENT IS SUBJECT TO THOSE SAME TERMS AND CONDITIONS, AND YOUR USE HEREOF SHALL CONSTITUTE ACCEPTANCE OF AND AN AGREEMENT TO BE BOUND BY THE SAME. This document is subject to U.S. and international copyright laws and treaties. No part of this document may be reproduced in any form without the written authorization of Cloud Software Group, Inc. TIBCO, the TIBCO logo, the TIBCO O logo, DataSynapse, GridServer, DataSynapse Federator, FabricBroker, FabricServer, GridClient, LiveCluster, and SpeedLink are either registered trademarks or trademarks of Cloud Software Group, Inc. in the United States and/or other countries. All other product and company names and marks mentioned in this document are the property of their respective owners and are mentioned for identification purposes only. You acknowledge that all rights to these third party marks are the exclusive property of their respective owners. Please refer to Cloud SG's Third Party Trademark Notices (<https://www.cloud.com/legal>) for more information. This document includes fonts that are licensed under the SIL Open Font License, Version 1.1, which is available at: <https://scripts.sil.org/OFL> Copyright (c) Paul D. Hunt, with Reserved Font Name Source Sans Pro and Source Code Pro. Cloud SG software may be available on multiple operating systems. However, not all operating system platforms for a specific software version are released at the same time. See the "readme" file for the availability of a specific version of Cloud SG software on a specific operating system platform. THIS DOCUMENT IS PROVIDED "AS IS" WITHOUT WARRANTY OF ANY KIND, EITHER EXPRESS OR IMPLIED, INCLUDING, BUT NOT LIMITED TO, THE IMPLIED WARRANTIES OF MERCHANTABILITY, FITNESS FOR A PARTICULAR PURPOSE, OR NON-INFRINGEMENT. THIS DOCUMENT COULD INCLUDE TECHNICAL INACCURACIES OR TYPOGRAPHICAL ERRORS. CHANGES ARE PERIODICALLY ADDED TO THE INFORMATION

HEREIN; THESE CHANGES WILL BE INCORPORATED IN NEW EDITIONS OF THIS DOCUMENT. CLOUD SG MAY MAKE IMPROVEMENTS AND/OR CHANGES IN THE PRODUCT(S), THE PROGRAM(S), AND/OR THE SERVICES DESCRIBED IN THIS DOCUMENT AT ANY TIME WITHOUT NOTICE. THE CONTENTS OF THIS DOCUMENT MAY BE MODIFIED AND/OR QUALIFIED, DIRECTLY OR INDIRECTLY, BY OTHER DOCUMENTATION WHICH ACCOMPANIES THIS SOFTWARE, INCLUDING BUT NOT LIMITED TO ANY RELEASE NOTES AND "README" FILES. This and other products of Cloud SG may be covered by registered patents. For details, please refer to the Virtual Patent Marking document located at <https://www.cloud.com/legal>. Copyright © 2001-2024. Cloud Software Group, Inc. All Rights Reserved.

New Features

The following features have been added since the last major release of TIBCO DataSynapse™ High-Performance Computing Cloud Adapter (HPCCA).

Version 2.1.0

Restarting HPCCA TIBCO DataSynapse™ High-Performance Computing Cloud Adapter can now restart, without restarting TIBCO DataSynapse GridServer® Manager for changes in `cloudprovider.properties` file. You must set the `USE_HPPCA_AUTO_RESTART` property present in `cloudprovider.properties` file to true. For more information, see TIBCO DataSynapse™ High-Performance Computing Cloud Adapter User Guide. VM batch termination for GCP By setting `BATCH_VM_TERMINATION` property to true in cloud provider, you can now terminate virtual machines in batch sizes. Park Engine feature for Aggressive Scale Down Using Park Engine feature, you can now mark engine daemon as a candidate to terminate, if busy engine count is less than or equal to `MINIMUM_BUSY_ENGINE`. This is based on value provided in `MINIMUM_BUSY_ENGINE`. For more information, see TIBCO DataSynapse™ High-Performance Computing Cloud Adapter User Guide.

Version 2.0.0

Support for multiple cloud providers DataSynapse HPCCA now supports engines for multiple cloud providers mentioned in the `cloudprovider.properties` file. For more information, see TIBCO DataSynapse™ High-Performance Computing Cloud Adapter User Guide. Aggressive scale down of engines If no task is running on the DataSynapse GridServer® Engine, DataSynapse HPCCA reduces the number of engines irrespective of the `ENGINE_IDLE_TIMEOUT` value. To enable this feature, set the `AGGRESSIVE_SCALEDOWN` property in the `cloudprovider.properties` file to true. For more information, see TIBCO DataSynapse™ High-Performance Computing Cloud Adapter User Guide. Monitoring engines on specific brokers DataSynapse HPCCA now monitors

engines on particular brokers. A list of brokers is provided in the `BROKER_HOSTNAME` property in the `cloudprovider.properties` file. For more information, see TIBCO DataSynapse™ High-Performance Computing CloudAdapter User Guide.

Version 1.5.0

No new features have been added in this release.

Version 1.4.0

Support for Google Cloud Platform Starting from this release, DataSynapse™ High-Performance Computing CloudAdapter (HPCCA) can be configured for Google Cloud Platform (GCP) by using the `cloudprovider.properties` file. For more information, see TIBCO DataSynapse™ High-Performance Computing Cloud Adapter User Guide. Consideration for DataSynapse HPCCA engines for calculating computational need Starting from this release, engines that are not created by DataSynapse HPCCA can be included when calculating computational needs. To enable this feature, set the `CONSIDER_NON_HPCCA_ENGINES` property in the `cloudprovider.properties` file to true. For more information, see TIBCO DataSynapse™ High-Performance Computing CloudAdapter User Guide.

Version 1.3.0

Support for scale sets Scale sets that allow you to create and manage a group of identical, load balanced VMs on Azure are now supported for Windows and Linux 64-bit platforms.

Version 1.2.0

Support for custom images Custom images for both Windows and Linux 64-bit platforms are now supported on AWS and Azure. Support for auto scaling group Autoscaling groups for Windows and Linux 64-bit platforms are now supported on AWS. Grid Library Deployer A new feature to assist in deployment is a TIBCO-supported tool for deploying grid libraries from the command line. The included `GridLibraryDeployer.zip` is a simple Java-based grid library deployment utility based on the `GridLibDeployer.java` class included in the TIBCO DataSynapse GridServer® SDK. Enter `java -jar GridLibraryDeployer.jar` at the command line. A list of options is displayed. Support for SSL-Enabled DataSynapse GridServer® Manager DataSynapse HPCCA can now be installed on SSL-enabled managers. Earlier versions did not support SSL-enabled managers.

Version 1.1.0

Windows engines and initial reconfiguration changes The initial release of the DataSynapse HPCCA only included Linux-based engines. It now supports Windows engines. Also, the

DataSynapse HPCCA now reconfigures an existing DataSynapseGridServer® Engine installation to enable it to connect to the current gridenvironment. This is done rather than the previous method of a fresh install, to enable you to configure the virtual machine to properly connect into your infrastructure and to enable for the preinstallation of things like grid libraries and caching solutions.

Version 1.0.0

TIBCO DataSynapse™ High-Performance Computing Cloud Adapter DataSynapse HPCCA extends the functionality of DataSynapse GridServer® by enabling it to dynamically create virtual machines and provision them with the EngineDaemon. It was created to allow customers to temporarily increase their compute capacity during periods of unusually high load on their DataSynapse GridServer® deployment. The initial release, version 1.0.0, includes Linux 64-bit engines and a very simple cloud management algorithm.

Changes in Functionality

No changes have been made in Functionality as of this release of TIBCO DataSynapse™ High-Performance Computing Cloud Adapter.

Deprecated Features

No features have been deprecated as of this release of TIBCO DataSynapse™ High-Performance Computing Cloud Adapter.

Removed Features

No features have been removed as of this release of TIBCO DataSynapse™ High-Performance Computing Cloud Adapter.

Migration and Compatibility

The following information provides migration procedures and a compatibility matrix for this release of TIBCO DataSynapse™ High-Performance Computing Cloud Adapter.

Migrating to Version 2.1.0

Migration to version 2.1.0 from previous versions of DataSynapse™ High-Performance Computing Cloud Adapter (HPCCA) is not supported. For critical functionality or VM Images/AMIs that need to be used, contact TIBCO Support.

Closed Issues

The table lists closed issues since version 1.0.0 of TIBCO DataSynapse™ High-Performance Computing Cloud Adapter.

Version 2.1.0

No issues have been closed in this release of DataSynapse HPCCA.

Version 2.0.0

No issues have been closed in this release of DataSynapse HPCCA.

Version 1.5.0

No issues have been closed in this release of DataSynapse HPCCA.

Version 1.4.0

No issues have been closed in this release of DataSynapse HPCCA.

Version 1.3.0

KEY	SUMMARY
GS-15344	When the GridLibrary Deployer was used without a driver.properties file, it threw aMalformed URL exception. The GridLibrary Deployer has been removed fromthis release.
GS-13281	A Null Pointer Exception appeared while editing the hook properties within theGridServer Administration tool. The adapter has been modified to fix this issue.

Version 1.2.0

Engine Key Summary

KEY	SUMMARY
GS-13246	The adapter previously updated the /etc/hosts file on Linux Engine VMs. There isno need to do this. By introducing the customizable

KEY	SUMMARY
	images and startupscripting (or ARM Templates) the Engine VM is no longer modified by the adapter automatically. If you want to continue to perform this activity, you must include it in User Data or VM Extension scripting.

Version 1.1.0

Key Summary

KEY	SUMMARY
GS-13278	The Director Communication Port was not being set properly on standalone Brokers. A DIRECTORPORT property was created in the cloudprovider.properties file which explicitly sets this value rather than relying on the install.properties.

Known Issues

The following issue exists in this release of TIBCO DataSynapse™ High-Performance Computing Cloud Adapter. Key Summary and Workaround Summary

Key	Description
HPCCA-444	Summary: An unexpected error occurs on DataSynapse GridServer® UI while enabling and disabling the hook from the UI. Workaround: None.

TIBCO Documentation and Support Services

For information about this product, you can read the documentation, contact TIBCO Support, and join TIBCO Community.

How to Access TIBCO Documentation

Documentation for TIBCO products is available on the Product Documentation website, mainly in HTML and PDF formats. The Product Documentation website is updated frequently and is more current than any other documentation included with the product.

Product-Specific Documentation

The following documentation for this product is available on the TIBCO DataSynapse™ High-Performance Computing Cloud Adapter Product Documentation page:

How to Contact Support for TIBCO Products

You can contact the Support team in the following ways:

- To access the Support Knowledge Base and getting personalized content about products you are interested in, visit our product Support website.
- To create a Support case, you must have a valid maintenance or support contract with a Cloud Software Group entity. You also need a username and password to log in to the product Support website. If you do not have a username, you can request one by clicking Register on the website.

How to Join TIBCO Community

TIBCO Community is the official channel for TIBCO customers, partners, and employees subject matter experts to share and access their collective experience. TIBCO Community offers access to Q&A forums, product wikis, and best practices. It also offers access to extensions, adapters, solution accelerators, and tools that extend and enable customers to gain full value from TIBCO products. In addition, users can submit and vote on feature requests from within the TIBCO Ideas Portal. For a free registration, go to TIBCO Community.

Legal and Third-Party Notices

SOME CLOUD SOFTWARE GROUP, INC. ("CLOUD SG") SOFTWARE AND CLOUD SERVICES EMBED, BUNDLE, OR OTHERWISE INCLUDE OTHER SOFTWARE, INCLUDING OTHER CLOUD SG SOFTWARE (COLLECTIVELY, "INCLUDED SOFTWARE"). USE OF INCLUDED SOFTWARE IS SOLELY TO ENABLE THE FUNCTIONALITY (OR PROVIDE LIMITED ADD-ON FUNCTIONALITY) OF THE LICENSED CLOUD SG SOFTWARE AND/OR CLOUD SERVICES. THE INCLUDED SOFTWARE IS NOT LICENSED TO BE USED OR ACCESSED BY ANY OTHER CLOUD SG SOFTWARE AND/OR CLOUD SERVICES OR FOR ANY OTHER PURPOSE. USE OF CLOUD SG SOFTWARE AND CLOUD SERVICES IS SUBJECT TO

THE TERMS AND CONDITIONS OF AN AGREEMENT FOUND IN EITHER A SEPARATELY EXECUTED AGREEMENT, OR, IF THERE IS NO SUCH SEPARATE AGREEMENT, THE CLICKWRAP ENDUSER AGREEMENT WHICH IS DISPLAYED WHEN ACCESSING, DOWNLOADING, OR INSTALLING THE SOFTWARE OR CLOUD SERVICES (AND WHICH IS DUPLICATED IN THE LICENSE FILE) OR IF THERE IS NO SUCH LICENSE AGREEMENT OR CLICKWRAP ENDUSER AGREEMENT, THE LICENSE(S) LOCATED IN THE "LICENSE" FILE(S) OF THE SOFTWARE. USE OF THIS DOCUMENT IS SUBJECT TO THOSE SAME TERMS AND CONDITIONS, AND YOUR USE HEREOF SHALL CONSTITUTE ACCEPTANCE OF AND AN AGREEMENT TO BE BOUND BY THE SAME. This document is subject to U.S. and international copyright laws and treaties. No part of this document may be reproduced in any form without the written authorization of Cloud Software Group, Inc. TIBCO, the TIBCO logo, the TIBCO O logo, DataSynapse, GridServer, DataSynapse Federator, FabricBroker, FabricServer, GridClient, LiveCluster, and SpeedLink are either registered trademarks or trademarks of Cloud Software Group, Inc. in the United States and/or other countries. All other product and company names and marks mentioned in this document are the property of their respective owners and are mentioned for identification purposes only. You acknowledge that all rights to these third party marks are the exclusive property of their respective owners. Please refer to Cloud SG's Third Party Trademark Notices (<https://www.cloud.com/legal>) for more information. This document includes fonts that are licensed under the SIL Open Font License, Version 1.1, which is available at: <https://scripts.sil.org/OFL> Copyright (c) Paul D. Hunt, with Reserved Font Name Source Sans Pro and Source Code Pro. Cloud SG software may be available on multiple operating systems. However, not all operating system platforms for a specific software version are released at the same time. See the "readme" file for the availability of a specific version of Cloud SG software on a specific operating system platform. THIS DOCUMENT IS PROVIDED "AS IS" WITHOUT WARRANTY OF ANY KIND, EITHER EXPRESS OR IMPLIED, INCLUDING, BUT NOT LIMITED TO, THE IMPLIED WARRANTIES OF MERCHANTABILITY, FITNESS FOR A PARTICULAR PURPOSE, OR NON-INFRINGEMENT. THIS DOCUMENT COULD INCLUDE TECHNICAL INACCURACIES OR TYPOGRAPHICAL ERRORS. CHANGES ARE PERIODICALLY ADDED TO THE INFORMATION HEREIN; THESE CHANGES WILL BE INCORPORATED IN NEW EDITIONS OF THIS DOCUMENT. CLOUD SG MAY MAKE IMPROVEMENTS AND/OR CHANGES IN THE PRODUCT(S), THE PROGRAM(S), AND/OR THE SERVICES DESCRIBED IN THIS DOCUMENT AT ANY TIME WITHOUT NOTICE. THE CONTENTS OF THIS DOCUMENT MAY BE MODIFIED AND/OR QUALIFIED, DIRECTLY OR INDIRECTLY, BY OTHER DOCUMENTATION WHICH ACCOMPANIES THIS SOFTWARE, INCLUDING BUT NOT LIMITED TO ANY RELEASE NOTES AND "README" FILES. This and other products of Cloud SG may be covered by registered patents. For details, please refer to the Virtual Patent Marking document located at <https://www.cloud.com/legal>. Copyright © 2001-2024. Cloud Software Group, Inc. All Rights Reserved.

New Features

The following features have been added since the last major release of TIBCO DataSynapse™ High-Performance Computing Cloud Adapter (HPCCA).

Version 2.1.0

Restarting HPCCA TIBCO DataSynapse™ High-Performance Computing Cloud Adapter can now restart, without restarting TIBCO DataSynapse GridServer® Manager for changes in cloudprovider.properties file. You must set the USE_HPCCA_AUTO_RESTART property present in cloudprovider.properties file to true. For more information, see TIBCO DataSynapse™ High-Performance Computing Cloud Adapter User Guide. VM batch termination for GCP By setting BATCH_VM_TERMINATION property to true in cloud provider, you can now terminate virtual machines in batch sizes. Park Engine feature for Aggressive Scale Down Using Park Engine feature, you can now mark engine daemon as a candidate to terminate, if busy engine count is less than or equal to MINIMUM_BUSY_ENGINE. This is based on value provided in MINIMUM_BUSY_ENGINE. For more information, see TIBCO DataSynapse™ High-Performance Computing Cloud Adapter User Guide.

Version 2.0.0

Support for multiple cloud providers DataSynapse HPCCA now supports engines for multiple cloud providers mentioned in the cloudprovider.properties file. For more information, see TIBCO DataSynapse™ High-Performance Computing Cloud Adapter User Guide. Aggressive scale down of engines If no task is running on the DataSynapse GridServer® Engine, DataSynapse HPCCA reduces the number of engines irrespective of the ENGINE_IDLE_TIMEOUT value. To enable this feature, set the AGGRESSIVE_SCALEDOWN property in the cloudprovider.properties file to true. For more information, see TIBCO DataSynapse™ High-Performance Computing Cloud Adapter User Guide. Monitoring engines on specific brokers DataSynapse HPCCA now monitors engines on particular brokers. A list of brokers is provided in the BROKER_HOSTNAME property in the cloudprovider.properties file. For more information, see TIBCO DataSynapse™ High-Performance Computing Cloud Adapter User Guide.

Version 1.5.0

No new features have been added in this release.

Version 1.4.0

Support for Google Cloud Platform Starting from this release, DataSynapse™ High-Performance Computing Cloud Adapter (HPCCA) can be configured for Google Cloud Platform (GCP) by using

the `cloudprovider.properties` file. For more information, see TIBCO DataSynapse™ High-Performance Computing Cloud Adapter User Guide. Consideration for DataSynapse HPCCA engines for calculating computational need Starting from this release, engines that are not created by DataSynapse HPCCA can be included when calculating computational needs. To enable this feature, set the `CONSIDER_NON_HPCCA_ENGINES` property in the `cloudprovider.properties` file to true. For more information, see TIBCO DataSynapse™ High-Performance Computing Cloud Adapter User Guide.

Version 1.3.0

Support for scale sets Scale sets that allow you to create and manage a group of identical, load balanced VMs on Azure are now supported for Windows and Linux 64-bit platforms.

Version 1.2.0

Support for custom images Custom images for both Windows and Linux 64-bit platforms are now supported on AWS and Azure. Support for auto scaling group Autoscaling groups for Windows and Linux 64-bit platforms are now supported on AWS. Grid Library Deployer A new feature to assist in deployment is a TIBCO-supported tool for deploying grid libraries from the command line. The included `GridLibraryDeployer.zip` is a simple Java-based grid library deployment utility based on the `GridLibDeployer.java` class included in the TIBCO DataSynapse GridServer® SDK. Enter `java -jar GridLibraryDeployer.jar` at the command line. A list of options is displayed. Support for SSL-Enabled DataSynapse GridServer® Manager DataSynapse HPCCA can now be installed on SSL-enabled managers. Earlier versions did not support SSL-enabled managers.

Version 1.1.0

Windows engines and initial reconfiguration changes The initial release of the DataSynapse HPCCA only included Linux-based engines. It now supports Windows engines. Also, the DataSynapse HPCCA now reconfigures an existing DataSynapse GridServer® Engine installation to enable it to connect to the current grid environment. This is done rather than the previous method of a fresh install, to enable you to configure the virtual machine to properly connect into your infrastructure and to enable for the preinstallation of things like grid libraries and caching solutions.

Version 1.0.0

TIBCO DataSynapse™ High-Performance Computing Cloud Adapter DataSynapse HPCCA extends the functionality of DataSynapse GridServer® by enabling it to dynamically create virtual machines and provision them with the Engine Daemon. It was created to allow customers to temporarily increase their compute capacity during periods of unusually high load on their

DataSynapse GridServer® deployment. The initial release, version 1.0.0, includes Linux 64-bit engines and a very simple cloud management algorithm.

Changes in Functionality

No changes have been made in Functionality as of this release of TIBCO DataSynapse™ High-Performance Computing Cloud Adapter.

Deprecated Features

No features have been deprecated as of this release of TIBCO DataSynapse™ High-Performance Computing Cloud Adapter.

Removed Features

No features have been removed as of this release of TIBCO DataSynapse™ High-Performance Computing Cloud Adapter.

Migration and Compatibility

The following information provides migration procedures and a compatibility matrix for this release of TIBCO DataSynapse™ High-Performance Computing Cloud Adapter.

Migrating to Version 2.1.0

Migration to version 2.1.0 from previous versions of DataSynapse™ High-Performance Computing Cloud Adapter (HPCCA) is not supported. For critical functionality or VM Images/AMIs that need to be used, contact TIBCO Support.

Closed Issues

The table lists closed issues since version 1.0.0 of TIBCO DataSynapse™ High-Performance Computing Cloud Adapter.

Version 2.1.0

No issues have been closed in this release of DataSynapse HPCCA.

Version 2.0.0

No issues have been closed in this release of DataSynapse HPCCA.

Version 1.5.0

No issues have been closed in this release of DataSynapse HPCCA.

Version 1.4.0

No issues have been closed in this release of DataSynapse HPCCA.

Version 1.3.0

KEY	SUMMARY
GS-15344	When the GridLibrary Deployer was used without a driver.properties file, it threw aMalformed URL exception. The GridLibrary Deployer has been removed fromthis release.
GS-13281	A Null Pointer Exception appeared while editing the hook properties within theGridServer Administration tool. The adapter has been modified to fix this issue.

Version 1.2.0

Engine Key Summary

KEY	SUMMARY
GS-13246	The adapter previously updated the /etc/hosts file on Linux Engine VMs. There isno need to do this. By introducing the customizable images and startupscripting (or ARM Templates) the Engine VM is no longer modified by theadapter automatically. If you want to continue to perform this activity, you mustinclude it in User Data or VM Extension scripting.

Version 1.1.0

Key Summary

KEY	SUMMARY
GS-13278	The Director Communication Port was not being set properly on standaloneBrokers. A DIRECTORPORT property was created in the cloudprovider.properties filewhich explicitly sets this value rather than relying on the install.properties.

Known Issues

The following issue exists in this release of TIBCO DataSynapse™High-PerformanceComputing Cloud Adapter. Key Summary and Workaround Summary

Key	Description
HPCCA-444	Summary: An unexpected error occurs on DataSynapse GridServer® UI whileenabling and disabling the hook from the UI. Workaround: None.

TIBCO Documentation and SupportServices

For information about this product, you can read the documentation, contact TIBCOSupport, and join TIBCO Community.

How to Access TIBCO Documentation

Documentation for TIBCO products is available on the Product Documentation website,mainly in HTML and PDF formats. The Product Documentation website is updated frequently and is more current than anyother documentation included with the product.

Product-Specific Documentation

The following documentation for this product is available on the TIBCO DataSynapse™High-Performance Computing Cloud Adapter Product Documentation page:

How to Contact Support for TIBCO Products

You can contact the Support team in the following ways:

- To access the Support Knowledge Base and getting personalized content about products you are interested in, visit our product Support website.
- To create a Support case, you must have a valid maintenance or support contract with a Cloud Software Group entity. You also need a username and password to log in to the product Support website. If you do not have a username, you can request one by clicking Register on the website.

How to Join TIBCO Community

TIBCO Community is the official channel for TIBCO customers, partners, and employees subject matter experts to share and access their collective experience. TIBCO Community offers access to Q&A forums, product wikis, and best practices. It also offers access to extensions, adapters, solution accelerators, and tools that extend and enable customers to gain full value from TIBCO products. In addition, users can submit and vote on feature requests from within the TIBCO Ideas Portal. For a free registration, go to TIBCO Community.

Legal and Third-Party Notices

SOME CLOUD SOFTWARE GROUP, INC. ("CLOUD SG") SOFTWARE AND CLOUD SERVICES EMBED, BUNDLE, OR OTHERWISE INCLUDE OTHER SOFTWARE, INCLUDING OTHER CLOUD SG SOFTWARE (COLLECTIVELY, "INCLUDED SOFTWARE"). USE OF INCLUDED SOFTWARE IS SOLELY TO ENABLE THE FUNCTIONALITY (OR PROVIDE LIMITED ADD-ON FUNCTIONALITY) OF THE LICENSED CLOUD SG SOFTWARE AND/OR CLOUD SERVICES. THE INCLUDED SOFTWARE IS NOT LICENSED TO BE USED OR ACCESSED BY ANY OTHER CLOUD SG SOFTWARE AND/OR CLOUD SERVICES OR FOR ANY OTHER PURPOSE. USE OF CLOUD SG SOFTWARE AND CLOUD SERVICES IS SUBJECT TO THE TERMS AND CONDITIONS OF AN AGREEMENT FOUND IN EITHER A SEPARATELY EXECUTED AGREEMENT, OR, IF THERE IS NO SUCH SEPARATE AGREEMENT, THE CLICKWRAP END USER AGREEMENT WHICH IS DISPLAYED WHEN ACCESSING, DOWNLOADING, OR INSTALLING THE SOFTWARE OR CLOUD SERVICES (AND WHICH IS DUPLICATED IN THE LICENSE FILE) OR IF THERE IS NO SUCH LICENSE AGREEMENT OR CLICKWRAP END USER AGREEMENT, THE LICENSE(S) LOCATED IN THE "LICENSE" FILE(S) OF THE SOFTWARE. USE OF THIS DOCUMENT IS SUBJECT TO THOSE SAME TERMS AND CONDITIONS, AND YOUR USE HEREOF SHALL CONSTITUTE ACCEPTANCE OF AND AN AGREEMENT TO BE BOUND BY THE SAME. This document is subject to U.S. and international copyright laws and treaties. No part of this document may be reproduced in any form without the written authorization of Cloud Software Group, Inc. TIBCO, the TIBCO logo, the TIBCO O logo, DataSynapse, GridServer, DataSynapse Federator, FabricBroker, FabricServer, GridClient, LiveCluster, and SpeedLink are either registered trademarks or trademarks of Cloud Software

Group, Inc. in the United States and/or other countries. All other product and company names and marks mentioned in this document are the property of their respective owners and are mentioned for identification purposes only. You acknowledge that all rights to these third party marks are the exclusive property of their respective owners. Please refer to Cloud SG's Third Party Trademark Notices (<https://www.cloud.com/legal>) for more information. This document includes fonts that are licensed under the SIL Open Font License, Version 1.1, which is available at: <https://scripts.sil.org/OFL> Copyright (c) Paul D. Hunt, with Reserved Font Name Source Sans Pro and Source Code Pro. Cloud SG software may be available on multiple operating systems. However, not all operating system platforms for a specific software version are released at the same time. See the "readme" file for the availability of a specific version of Cloud SG software on a specific operating system platform. THIS DOCUMENT IS PROVIDED "AS IS" WITHOUT WARRANTY OF ANY KIND, EITHER EXPRESS OR IMPLIED, INCLUDING, BUT NOT LIMITED TO, THE IMPLIED WARRANTIES OF MERCHANTABILITY, FITNESS FOR A PARTICULAR PURPOSE, OR NON-INFRINGEMENT. THIS DOCUMENT COULD INCLUDE TECHNICAL INACCURACIES OR TYPOGRAPHICAL ERRORS. CHANGES ARE PERIODICALLY ADDED TO THE INFORMATION HEREIN; THESE CHANGES WILL BE INCORPORATED IN NEW EDITIONS OF THIS DOCUMENT. CLOUD SG MAY MAKE IMPROVEMENTS AND/OR CHANGES IN THE PRODUCT(S), THE PROGRAM(S), AND/OR THE SERVICES DESCRIBED IN THIS DOCUMENT AT ANY TIME WITHOUT NOTICE. THE CONTENTS OF THIS DOCUMENT MAY BE MODIFIED AND/OR QUALIFIED, DIRECTLY OR INDIRECTLY, BY OTHER DOCUMENTATION WHICH ACCOMPANIES THIS SOFTWARE, INCLUDING BUT NOT LIMITED TO ANY RELEASE NOTES AND "README" FILES. This and other products of Cloud SG may be covered by registered patents. For details, please refer to the Virtual Patent Marking document located at <https://www.cloud.com/legal>. Copyright © 2001-2024. Cloud Software Group, Inc. All Rights Reserved.

New Features

The following features have been added since the last major release of TIBCO DataSynapse™ High-Performance Computing Cloud Adapter (HPCCA).

Version 2.1.0

Restarting HPCCA TIBCO DataSynapse™ High-Performance Computing Cloud Adapter can now restart, without restarting TIBCO DataSynapse GridServer® Manager for changes in `cloudprovider.properties` file. You must set the `USE_HPPCA_AUTO_RESTART` property present in `cloudprovider.properties` file to true. For more information, see TIBCO DataSynapse™ High-Performance Computing Cloud Adapter User Guide. VM batch termination for GCP By setting `BATCH_VM_TERMINATION` property to true in cloud provider, you can now terminate virtual

machines in batch sizes. Park Engine feature for Aggressive Scale Down Using Park Engine feature, you can now mark engine daemon as a candidate to terminate, if busy engine count is less than or equal to `MINIMUM_BUSY_ENGINE`. This is based on value provided in `MINIMUM_BUSY_ENGINE`. For more information, see TIBCO DataSynapse™ High-Performance Computing Cloud Adapter User Guide.

Version 2.0.0

Support for multiple cloud providers DataSynapse HPCCA now supports engines for multiple cloud providers mentioned in the `cloudprovider.properties` file. For more information, see TIBCO DataSynapse™ High-Performance Computing Cloud Adapter User Guide. Aggressive scale down of engines If no task is running on the DataSynapse GridServer® Engine, DataSynapse HPCCA reduces the number of engines irrespective of the `ENGINEIDLETIMEOUT` value. To enable this feature, set the `AGGRESSIVE_SCALEDOWN` property in the `cloudprovider.properties` file to true. For more information, see TIBCO DataSynapse™ High-Performance Computing Cloud Adapter User Guide. Monitoring engines on specific brokers DataSynapse HPCCA now monitors engines on particular brokers. A list of brokers is provided in the `BROKER_HOSTNAME` property in the `cloudprovider.properties` file. For more information, see TIBCO DataSynapse™ High-Performance Computing Cloud Adapter User Guide.

Version 1.5.0

No new features have been added in this release.

Version 1.4.0

Support for Google Cloud Platform Starting from this release, DataSynapse™ High-Performance Computing Cloud Adapter (HPCCA) can be configured for Google Cloud Platform (GCP) by using the `cloudprovider.properties` file. For more information, see TIBCO DataSynapse™ High-Performance Computing Cloud Adapter User Guide. Consideration for DataSynapse HPCCA engines for calculating computational need Starting from this release, engines that are not created by DataSynapse HPCCA can be included when calculating computational needs. To enable this feature, set the `CONSIDER_NON_HPCCA_ENGINES` property in the `cloudprovider.properties` file to true. For more information, see TIBCO DataSynapse™ High-Performance Computing Cloud Adapter User Guide.

Version 1.3.0

Support for scale sets Scale sets that allow you to create and manage a group of identical, load balanced VMs on Azure are now supported for Windows and Linux 64-bit platforms.

Version 1.2.0

Support for custom images Custom images for both Windows and Linux 64-bit platforms are now supported on AWS and Azure. Support for auto scaling group Autoscaling groups for Windows and Linux 64-bit platforms are now supported on AWS. Grid Library Deployer A new feature to assist in deployment is a TIBCO-supported tool for deploying grid libraries from the command line. The included GridLibraryDeployer.zip is a simple Java-based grid library deployment utility based on the GridLibDeployer.java class included in the TIBCO DataSynapse GridServer® SDK. Enter `java -jar GridLibraryDeployer.jar` at the command line. A list of options is displayed. Support for SSL-Enabled DataSynapse GridServer® Manager DataSynapse HPCCA can now be installed on SSL-enabled managers. Earlier versions did not support SSL-enabled managers.

Version 1.1.0

Windows engines and initial reconfiguration changes The initial release of the DataSynapse HPCCA only included Linux-based engines. It now supports Windows engines. Also, the DataSynapse HPCCA now reconfigures an existing DataSynapse GridServer® Engine installation to enable it to connect to the current grid environment. This is done rather than the previous method of a fresh install, to enable you to configure the virtual machine to properly connect into your infrastructure and to enable for the preinstallation of things like grid libraries and caching solutions.

Version 1.0.0

TIBCO DataSynapse™ High-Performance Computing Cloud Adapter DataSynapse HPCCA extends the functionality of DataSynapse GridServer® by enabling it to dynamically create virtual machines and provision them with the EngineDaemon. It was created to allow customers to temporarily increase their compute capacity during periods of unusually high load on their DataSynapse GridServer® deployment. The initial release, version 1.0.0, includes Linux 64-bit engines and a very simple cloud management algorithm.

Changes in Functionality

No changes have been made in Functionality as of this release of TIBCO DataSynapse™ High-Performance Computing Cloud Adapter.

Deprecated Features

No features have been deprecated as of this release of TIBCO DataSynapse™ High-Performance Computing Cloud Adapter.

Removed Features

No features have been removed as of this release of TIBCO DataSynapse™High-Performance Computing Cloud Adapter

Migration and Compatibility

The following information provides migration procedures and a compatibility matrix for this release of TIBCO DataSynapse™High-Performance Computing Cloud Adapter.

Migrating to Version 2.1.0

Migration to version 2.1.0 from previous versions of DataSynapse™High-Performance Computing Cloud Adapter (HPCCA) is not supported. For critical functionality or VMImages/AMIs that need to be used, contact TIBCO Support.

Closed Issues

The table lists closed issues since version 1.0.0 of TIBCO DataSynapse™High-Performance Computing Cloud Adapter.

Version 2.1.0

No issues have been closed in this release of DataSynapse HPCCA.

Version 2.0.0

No issues have been closed in this release of DataSynapse HPCCA.

Version 1.5.0

No issues have been closed in this release of DataSynapse HPCCA.

Version 1.4.0

No issues have been closed in this release of DataSynapse HPCCA.

Version 1.3.0

KEY	SUMMARY
GS-15344	When the GridLibrary Deployer was used without a driver.properties file, it threw

KEY	SUMMARY
	aMalformed URL exception. The GridLibrary Deployer has been removed from this release.
GS-13281	A Null Pointer Exception appeared while editing the hook properties within the GridServer Administration tool. The adapter has been modified to fix this issue.

Version 1.2.0

Engine Key Summary

KEY	SUMMARY
GS-13246	The adapter previously updated the /etc/hosts file on Linux Engine VMs. There is no need to do this. By introducing the customizable images and startup scripting (or ARM Templates) the Engine VM is no longer modified by the adapter automatically. If you want to continue to perform this activity, you must include it in User Data or VM Extension scripting.

Version 1.1.0

Key Summary

KEY	SUMMARY
GS-13278	The Director Communication Port was not being set properly on standalone Brokers. A DIRECTORPORT property was created in the cloudprovider.properties file which explicitly sets this value rather than relying on the install.properties.

Known Issues

The following issue exists in this release of TIBCO DataSynapse™ High-Performance Computing Cloud Adapter. Key Summary and Workaround Summary

Key	Description
HPCCA-444	Summary: An unexpected error occurs on DataSynapse GridServer® UI while enabling and disabling the hook from the UI. Workaround: None.

TIBCO Documentation and Support Services

For information about this product, you can read the documentation, contact TIBCO Support, and join TIBCO Community.

How to Access TIBCO Documentation

Documentation for TIBCO products is available on the Product Documentation website, mainly in HTML and PDF formats. The Product Documentation website is updated frequently and is more current than any other documentation included with the product.

Product-Specific Documentation

The following documentation for this product is available on the TIBCO DataSynapse™ High-Performance Computing Cloud Adapter Product Documentation page:

How to Contact Support for TIBCO Products

You can contact the Support team in the following ways:

- To access the Support Knowledge Base and getting personalized content about products you are interested in, visit our product Support website.
- To create a Support case, you must have a valid maintenance or support contract with a Cloud Software Group entity. You also need a username and password to log in to the product Support website. If you do not have a username, you can request one by clicking Register on the website.

How to Join TIBCO Community

TIBCO Community is the official channel for TIBCO customers, partners, and employeesubject matter experts to share and access their collective experience. TIBCOCommunity offers access to Q&A forums, product wikis, and best practices. It also offersaccess to extensions, adapters, solution accelerators, and tools that extend and enable customers to gain full value from TIBCO products. In addition, users can submit and voteon feature requests from within the TIBCO Ideas Portal. For a free registration, go toTIBCO Community.

Legal and Third-Party Notices

SOME CLOUD SOFTWARE GROUP, INC. ("CLOUD SG") SOFTWARE AND CLOUD SERVICESEMBED, BUNDLE, OR OTHERWISE INCLUDE OTHER SOFTWARE, INCLUDING OTHERCLOUD SG SOFTWARE (COLLECTIVELY, "INCLUDED SOFTWARE"). USE OF INCLUDEDSOFTWARE IS SOLELY TO ENABLE THE FUNCTIONALITY (OR PROVIDE LIMITED ADD-ONFUNCTIONALITY) OF THE LICENSED CLOUD SG SOFTWARE AND/OR CLOUD SERVICES.THE INCLUDED SOFTWARE IS NOT LICENSED TO BE USED OR ACCESSED BY ANYOTHER CLOUD SG SOFTWARE AND/OR CLOUD SERVICES OR FOR ANY OTHERPURPOSE. USE OF CLOUD SG SOFTWARE AND CLOUD SERVICES IS SUBJECT TO THE TERMS ANDCONDITIONS OF AN AGREEMENT FOUND IN EITHER A SEPARATELY EXECUTEDAGREEMENT, OR, IF THERE IS NO SUCH SEPARATE AGREEMENT, THE CLICKWRAP ENDUSER AGREEMENT WHICH IS DISPLAYED WHEN ACCESSING, DOWNLOADING, ORINSTALLING THE SOFTWARE OR CLOUD SERVICES (AND WHICH IS DUPLICATED IN THELICENSE FILE) OR IF THERE IS NO SUCH LICENSE AGREEMENT OR CLICKWRAP ENDUSER AGREEMENT, THE LICENSE(S) LOCATED IN THE "LICENSE" FILE(S) OF THESOFTWARE. USE OF THIS DOCUMENT IS SUBJECT TO THOSE SAME TERMS ANDCONDITIONS, AND YOUR USE HEREOF SHALL CONSTITUTE ACCEPTANCE OF AND ANAGREEMENT TO BE BOUND BY THE SAME. This document is subject to U.S. and international copyright laws and treaties. No part of thisdocument may be reproduced in any form without the written authorization of Cloud SoftwareGroup, Inc. TIBCO, the TIBCO logo, the TIBCO O logo, DataSynapse, GridServer, DataSynapse Federator,FabricBroker, FabricServer, GridClient, LiveCluster, and SpeedLink are either registeredtrademarks or trademarks of Cloud Software Group, Inc. in the United States and/or othercountries. All other product and company names and marks mentioned in this document are the property oftheir respective owners and are mentioned for identification purposes only. You acknowledge thatall rights to these third party marks are the exclusive property of their respective owners. Pleaserefer to Cloud SG's Third Party Trademark Notices (<https://www.cloud.com/legal>) for moreinformation. This document includes fonts that are licensed under the SIL Open Font License, Version 1.1,which is available at: <https://scripts.sil.org/OFL> Copyright (c) Paul D. Hunt, with Reserved Font Name Source Sans Pro and Source Code

Pro. Cloud SG software may be available on multiple operating systems. However, not all operating system platforms for a specific software version are released at the same time. See the “readme” file for the availability of a specific version of Cloud SG software on a specific operating system platform. THIS DOCUMENT IS PROVIDED “AS IS” WITHOUT WARRANTY OF ANY KIND, EITHER EXPRESS OR IMPLIED, INCLUDING, BUT NOT LIMITED TO, THE IMPLIED WARRANTIES OF MERCHANTABILITY, FITNESS FOR A PARTICULAR PURPOSE, OR NON-INFRINGEMENT. THIS DOCUMENT COULD INCLUDE TECHNICAL INACCURACIES OR TYPOGRAPHICAL ERRORS. CHANGES ARE PERIODICALLY ADDED TO THE INFORMATION HEREIN; THESE CHANGES WILL BE INCORPORATED IN NEW EDITIONS OF THIS DOCUMENT. CLOUD SG MAY MAKE IMPROVEMENTS AND/OR CHANGES IN THE PRODUCT(S), THE PROGRAM(S), AND/OR THE SERVICES DESCRIBED IN THIS DOCUMENT AT ANY TIME WITHOUT NOTICE. THE CONTENTS OF THIS DOCUMENT MAY BE MODIFIED AND/OR QUALIFIED, DIRECTLY OR INDIRECTLY, BY OTHER DOCUMENTATION WHICH ACCOMPANIES THIS SOFTWARE, INCLUDING BUT NOT LIMITED TO ANY RELEASE NOTES AND “README” FILES. This and other products of Cloud SG may be covered by registered patents. For details, please refer to the Virtual Patent Marking document located at <https://www.cloud.com/legal>. Copyright © 2001-2024. Cloud Software Group, Inc. All Rights Reserved.

New Features

The following features have been added since the last major release of TIBCO DataSynapse™ High-Performance Computing Cloud Adapter (HPCCA).

Version 2.1.0

Restarting HPCCA TIBCO DataSynapse™ High-Performance Computing Cloud Adapter can now restart, without restarting TIBCO DataSynapse GridServer® Manager for changes in `cloudprovider.properties` file. You must set the `USE_HPPCA_AUTO_RESTART` property present in `cloudprovider.properties` file to true. For more information, see TIBCO DataSynapse™ High-Performance Computing Cloud Adapter User Guide. VM batch termination for GCP By setting `BATCH_VM_TERMINATION` property to true in cloud provider, you can now terminate virtual machines in batch sizes. Park Engine feature for Aggressive Scale Down Using Park Engine feature, you can now mark engine daemon as a candidate to terminate, if busy engine count is less than or equal to `MINIMUM_BUSY_ENGINE`. This is based on value provided in `MINIMUM_BUSY_ENGINE`. For more information, see TIBCO DataSynapse™ High-Performance Computing Cloud Adapter User Guide.

Version 2.0.0

Support for multiple cloud providers DataSynapse HPCCA now supports engines for multiple cloud providers mentioned in the `cloudprovider.properties` file. For more information, see TIBCO DataSynapse™ High-Performance Computing Cloud Adapter User Guide. Aggressive scale down of engines If no task is running on the DataSynapse GridServer® Engine, DataSynapse HPCCA reduces the number of engines irrespective of the `ENGINEIDLETIMEOUT` value. To enable this feature, set the `AGGRESSIVE_SCALEDOWN` property in the `cloudprovider.properties` file to true. For more information, see TIBCO DataSynapse™ High-Performance Computing Cloud Adapter User Guide. Monitoring engines on specific brokers DataSynapse HPCCA now monitors engines on particular brokers. A list of brokers is provided in the `BROKER_HOSTNAME` property in the `cloudprovider.properties` file. For more information, see TIBCO DataSynapse™ High-Performance Computing Cloud Adapter User Guide.

Version 1.5.0

No new features have been added in this release.

Version 1.4.0

Support for Google Cloud Platform Starting from this release, DataSynapse™ High-Performance Computing Cloud Adapter (HPCCA) can be configured for Google Cloud Platform (GCP) by using the `cloudprovider.properties` file. For more information, see TIBCO DataSynapse™ High-Performance Computing Cloud Adapter User Guide. Consideration for DataSynapse HPCCA engines for calculating computational need Starting from this release, engines that are not created by DataSynapse HPCCA can be included when calculating computational needs. To enable this feature, set the `CONSIDER_NON_HPCCA_ENGINES` property in the `cloudprovider.properties` file to true. For more information, see TIBCO DataSynapse™ High-Performance Computing Cloud Adapter User Guide.

Version 1.3.0

Support for scale sets Scale sets that allow you to create and manage a group of identical, load balanced VMs on Azure are now supported for Windows and Linux 64-bit platforms.

Version 1.2.0

Support for custom images Custom images for both Windows and Linux 64-bit platforms are now supported on AWS and Azure. Support for auto scaling group Autoscaling groups for Windows and Linux 64-bit platforms are now supported on AWS. Grid Library Deployer A new feature to assist in deployment is a TIBCO-supported tool for deploying grid libraries from the command line. The

included GridLibraryDeployer.zip is a simple Java-based grid library deployment utility based on the GridLibDeployer.java class included in the TIBCO DataSynapse GridServer® SDK. Enter `java -jar GridLibraryDeployer.jar` at the command line. A list of options is displayed. Support for SSL-Enabled DataSynapse GridServer® Manager DataSynapse HPCCA can now be installed on SSL-enabled managers. Earlier versions did not support SSL-enabled managers.

Version 1.1.0

Windows engines and initial reconfiguration changes The initial release of the DataSynapse HPCCA only included Linux-based engines. It now supports Windows engines. Also, the DataSynapse HPCCA now reconfigures an existing DataSynapse GridServer® Engine installation to enable it to connect to the current grid environment. This is done rather than the previous method of a fresh install, to enable you to configure the virtual machine to properly connect into your infrastructure and to enable for the preinstallation of things like grid libraries and caching solutions.

Version 1.0.0

TIBCO DataSynapse™ High-Performance Computing Cloud Adapter DataSynapse HPCCA extends the functionality of DataSynapse GridServer® by enabling it to dynamically create virtual machines and provision them with the EngineDaemon. It was created to allow customers to temporarily increase their compute capacity during periods of unusually high load on their DataSynapse GridServer® deployment. The initial release, version 1.0.0, includes Linux 64-bit engines and a very simple cloud management algorithm.

Changes in Functionality

No changes have been made in Functionality as of this release of TIBCO DataSynapse™ High-Performance Computing Cloud Adapter.

Deprecated Features

No features have been deprecated as of this release of TIBCO DataSynapse™ High-Performance Computing Cloud Adapter.

Removed Features

No features have been removed as of this release of TIBCO DataSynapse™ High-Performance Computing Cloud Adapter

Migration and Compatibility

The following information provides migration procedures and a compatibility matrix for this release of TIBCO DataSynapse™ High-Performance Computing Cloud Adapter.

Migrating to Version 2.1.0

Migration to version 2.1.0 from previous versions of DataSynapse™ High-Performance Computing Cloud Adapter (HPCCA) is not supported. For critical functionality or VM Images/AMIs that need to be used, contact TIBCO Support.

Closed Issues

The table lists closed issues since version 1.0.0 of TIBCO DataSynapse™ High-Performance Computing Cloud Adapter.

Version 2.1.0

No issues have been closed in this release of DataSynapse HPCCA.

Version 2.0.0

No issues have been closed in this release of DataSynapse HPCCA.

Version 1.5.0

No issues have been closed in this release of DataSynapse HPCCA.

Version 1.4.0

No issues have been closed in this release of DataSynapse HPCCA.

Version 1.3.0

KEY	SUMMARY
GS-15344	When the GridLibrary Deployer was used without a driver.properties file, it threw a Malformed URL exception. The GridLibrary Deployer has been removed from this release.
GS-13281	A Null Pointer Exception appeared while editing the hook properties within

KEY	SUMMARY
	theGridServer Administration tool. The adapter has been modified to fix this issue.

Version 1.2.0

Engine Key Summary

KEY	SUMMARY
GS-13246	The adapter previously updated the /etc/hosts file on Linux Engine VMs. There is no need to do this. By introducing the customizable images and startup scripting (or ARM Templates) the Engine VM is no longer modified by the adapter automatically. If you want to continue to perform this activity, you must include it in User Data or VM Extension scripting.

Version 1.1.0

Key Summary

KEY	SUMMARY
GS-13278	The Director Communication Port was not being set properly on standalone Brokers. A DIRECTORPORT property was created in the cloudprovider.properties file which explicitly sets this value rather than relying on the install.properties.

Known Issues

The following issue exists in this release of TIBCO DataSynapse™ High-Performance Computing Cloud Adapter. Key Summary and Workaround Summary

Key	Description
-----	-------------

HPCCA-444	Summary: An unexpected error occurs on DataSynapse GridServer® UI while enabling and disabling the hook from the UI. Workaround: None.
-----------	--

TIBCO Documentation and Support Services

For information about this product, you can read the documentation, contact TIBCO Support, and join TIBCO Community.

How to Access TIBCO Documentation

Documentation for TIBCO products is available on the Product Documentation website, mainly in HTML and PDF formats. The Product Documentation website is updated frequently and is more current than any other documentation included with the product.

Product-Specific Documentation

The following documentation for this product is available on the TIBCO DataSynapse™ High-Performance Computing Cloud Adapter Product Documentation page:

How to Contact Support for TIBCO Products

You can contact the Support team in the following ways:

- To access the Support Knowledge Base and getting personalized content about products you are interested in, visit our product Support website.
- To create a Support case, you must have a valid maintenance or support contract with a Cloud Software Group entity. You also need a username and password to log in to the product Support website. If you do not have a username, you can request one by clicking Register on the website.

How to Join TIBCO Community

TIBCO Community is the official channel for TIBCO customers, partners, and employees subject matter experts to share and access their collective experience. TIBCO Community offers access to Q&A forums, product wikis, and best practices. It also offers access to extensions, adapters, solution accelerators, and tools that extend and enable customers to gain full value from TIBCO products. In addition, users can submit and vote on feature requests from within the TIBCO Ideas Portal. For a free registration, go to TIBCO Community.

Legal and Third-Party Notices

SOME CLOUD SOFTWARE GROUP, INC. ("CLOUD SG") SOFTWARE AND CLOUD SERVICES EMBED, BUNDLE, OR OTHERWISE INCLUDE OTHER SOFTWARE, INCLUDING OTHER CLOUD SG SOFTWARE (COLLECTIVELY, "INCLUDED SOFTWARE"). USE OF INCLUDED SOFTWARE IS SOLELY TO ENABLE THE FUNCTIONALITY (OR PROVIDE LIMITED ADD-ON FUNCTIONALITY) OF THE LICENSED CLOUD SG SOFTWARE AND/OR CLOUD SERVICES. THE INCLUDED SOFTWARE IS NOT LICENSED TO BE USED OR ACCESSED BY ANY OTHER CLOUD SG SOFTWARE AND/OR CLOUD SERVICES OR FOR ANY OTHER PURPOSE. USE OF CLOUD SG SOFTWARE AND CLOUD SERVICES IS SUBJECT TO THE TERMS AND CONDITIONS OF AN AGREEMENT FOUND IN EITHER A SEPARATELY EXECUTED AGREEMENT, OR, IF THERE IS NO SUCH SEPARATE AGREEMENT, THE CLICKWRAP ENDUSER AGREEMENT WHICH IS DISPLAYED WHEN ACCESSING, DOWNLOADING, OR INSTALLING THE SOFTWARE OR CLOUD SERVICES (AND WHICH IS DUPLICATED IN THE LICENSE FILE) OR IF THERE IS NO SUCH LICENSE AGREEMENT OR CLICKWRAP ENDUSER AGREEMENT, THE LICENSE(S) LOCATED IN THE "LICENSE" FILE(S) OF THE SOFTWARE. USE OF THIS DOCUMENT IS SUBJECT TO THOSE SAME TERMS AND CONDITIONS, AND YOUR USE HEREOF SHALL CONSTITUTE ACCEPTANCE OF AND AN AGREEMENT TO BE BOUND BY THE SAME. This document is subject to U.S. and international copyright laws and treaties. No part of this document may be reproduced in any form without the written authorization of Cloud Software Group, Inc. TIBCO, the TIBCO logo, the TIBCO O logo, DataSynapse, GridServer, DataSynapse Federator, FabricBroker, FabricServer, GridClient, LiveCluster, and SpeedLink are either registered trademarks or trademarks of Cloud Software Group, Inc. in the United States and/or other countries. All other product and company names and marks mentioned in this document are the property of their respective owners and are mentioned for identification purposes only. You acknowledge that all rights to these third party marks are the exclusive property of their respective owners. Please refer to Cloud SG's Third Party Trademark Notices (<https://www.cloud.com/legal>) for more information. This document includes fonts that are licensed under the SIL Open Font License, Version 1.1, which is available at: <https://scripts.sil.org/OFL> Copyright (c) Paul D. Hunt, with Reserved Font Name Source Sans Pro and Source Code Pro. Cloud SG software may be available on multiple operating systems. However, not all operating system platforms for a specific software version are released at the same time. See the "readme" file for the availability of a specific version of Cloud SG software on a specific operating system platform. THIS DOCUMENT IS PROVIDED "AS IS" WITHOUT WARRANTY OF ANY KIND, EITHER EXPRESS OR IMPLIED, INCLUDING, BUT NOT LIMITED TO, THE IMPLIED WARRANTIES OF MERCHANTABILITY, FITNESS FOR A PARTICULAR PURPOSE, OR NON-INFRINGEMENT. THIS DOCUMENT COULD INCLUDE TECHNICAL INACCURACIES OR TYPOGRAPHICAL ERRORS. CHANGES ARE PERIODICALLY ADDED TO THE INFORMATION

HEREIN; THESE CHANGES WILL BE INCORPORATED IN NEW EDITIONS OF THIS DOCUMENT. CLOUD SG MAY MAKE IMPROVEMENTS AND/OR CHANGES IN THE PRODUCT(S), THE PROGRAM(S), AND/OR THE SERVICES DESCRIBED IN THIS DOCUMENT AT ANY TIME WITHOUT NOTICE. THE CONTENTS OF THIS DOCUMENT MAY BE MODIFIED AND/OR QUALIFIED, DIRECTLY OR INDIRECTLY, BY OTHER DOCUMENTATION WHICH ACCOMPANIES THIS SOFTWARE, INCLUDING BUT NOT LIMITED TO ANY RELEASE NOTES AND "README" FILES. This and other products of Cloud SG may be covered by registered patents. For details, please refer to the Virtual Patent Marking document located at <https://www.cloud.com/legal>. Copyright © 2001-2024. Cloud Software Group, Inc. All Rights Reserved.

New Features

The following features have been added since the last major release of TIBCO DataSynapse™ High-Performance Computing Cloud Adapter (HPCCA).

Version 2.1.0

Restarting HPCCA TIBCO DataSynapse™ High-Performance Computing Cloud Adapter can now restart, without restarting TIBCO DataSynapse GridServer® Manager for changes in cloudprovider.properties file. You must set the USE_HPPCA_AUTO_RESTART property present in cloudprovider.properties file to true. For more information, see TIBCO DataSynapse™ High-Performance Computing Cloud Adapter User Guide. VM batch termination for GCP By setting BATCH_VM_TERMINATION property to true in cloud provider, you can now terminate virtual machines in batch sizes. Park Engine feature for Aggressive Scale Down Using Park Engine feature, you can now mark engine daemon as a candidate to terminate, if busy engine count is less than or equal to MINIMUM_BUSY_ENGINE. This is based on value provided in MINIMUM_BUSY_ENGINE. For more information, see TIBCO DataSynapse™ High-Performance Computing Cloud Adapter User Guide.

Version 2.0.0

Support for multiple cloud providers DataSynapse HPCCA now supports engines for multiple cloud providers mentioned in the cloudprovider.properties file. For more information, see TIBCO DataSynapse™ High-Performance Computing Cloud Adapter User Guide. Aggressive scale down of engines If no task is running on the DataSynapse GridServer® Engine, DataSynapse HPCCA reduces the number of engines irrespective of the ENGINE_IDLE_TIMEOUT value. To enable this feature, set the AGGRESSIVE_SCALEDOWN property in the cloudprovider.properties file to true. For more information, see TIBCO DataSynapse™ High-Performance Computing Cloud Adapter User Guide. Monitoring engines on specific brokers DataSynapse HPCCA now monitors engines on particular brokers. A list of brokers is provided in the BROKER_HOSTNAME property in the cloudprovider.properties file. For more information, see TIBCO DataSynapse™ High-Performance Computing Cloud Adapter User Guide.

Version 1.5.0

No new features have been added in this release.

Version 1.4.0

Support for Google Cloud Platform Starting from this release, DataSynapse™High-Performance Computing CloudAdapter (HPCCA) can be configured for Google Cloud Platform (GCP) by using the `cloudprovider.properties` file. For more information, see TIBCO DataSynapse™High-Performance Computing Cloud Adapter User Guide. Consideration for DataSynapse HPCCA engines for calculating computational need Starting from this release, engines that are not created by DataSynapse HPCCA canbe included when calculating computational needs. To enable this feature, set the `CONSIDER_NON_HPCCA_ENGINES` property in the `cloudprovider.properties` file to true. Formore information, see TIBCO DataSynapse™High-Performance Computing CloudAdapter User Guide.

Version 1.3.0

Support for scale sets Scale sets that allow you to create and manage a group of identical, load balancedVMs on Azure are now supported for Windows and Linux 64-bit platforms.

Version 1.2.0

Support for custom images Custom images for both Windows and Linux 64-bit platforms are now supported onAWS and Azure. Support for auto scaling group Autoscaling groups for Windows and Linux 64-bit platforms are now supported onAWS. Grid Library Deployer A new feature to assist in deployment is a TIBCO-supported tool for deploying gridlibraries from the command line. The included `GridLibraryDeployer.zip` is a simple Java-based grid library deployment utility based on the `GridLibDeployer.java` class included inthe TIBCO DataSynapse GridServer® SDK. Enter `java -jar GridLibraryDeployer.jar` at thecommand line. A list of options is displayed. Support for SSL-Enabled DataSynapse GridServer® Manager DataSynapse HPCCA can now be installed on SSL-enabled managers. Earlierversions did not support SSL-enabled managers.

Version 1.1.0

Windows engines and initial reconfiguration changes The initial release of the DataSynapse HPCCA only included Linux-based engines. Itnow supports Windows engines. Also, the DataSynapse HPCCA now reconfigures an existing DataSynapseGridServer® Engine installation to enable it to connect to the current gridenvironment. This is done rather than the previous method of a fresh install, to enableyou to configure the virtual machine to properly connect into your infrastructure and toenable for the preinstallation of things like grid libraries and caching solutions.

Version 1.0.0

TIBCO DataSynapse™ High-Performance Computing Cloud Adapter DataSynapse HPCCA extends the functionality of DataSynapse GridServer® by enabling it to dynamically create virtual machines and provision them with the EngineDaemon. It was created to allow customers to temporarily increase their compute capacity during periods of unusually high load on their DataSynapse GridServer® deployment. The initial release, version 1.0.0, includes Linux 64-bit engines and a very simple cloud management algorithm.

Changes in Functionality

No changes have been made in Functionality as of this release of TIBCO DataSynapse™ High-Performance Computing Cloud Adapter.

Deprecated Features

No features have been deprecated as of this release of TIBCO DataSynapse™ High-Performance Computing Cloud Adapter.

Removed Features

No features have been removed as of this release of TIBCO DataSynapse™ High-Performance Computing Cloud Adapter.

Migration and Compatibility

The following information provides migration procedures and a compatibility matrix for this release of TIBCO DataSynapse™ High-Performance Computing Cloud Adapter.

Migrating to Version 2.1.0

Migration to version 2.1.0 from previous versions of DataSynapse™ High-Performance Computing Cloud Adapter (HPCCA) is not supported. For critical functionality or VM Images/AMIs that need to be used, contact TIBCO Support.

Closed Issues

The table lists closed issues since version 1.0.0 of TIBCO DataSynapse™ High-Performance Computing Cloud Adapter.

Version 2.1.0

No issues have been closed in this release of DataSynapse HPCCA.

Version 2.0.0

No issues have been closed in this release of DataSynapse HPCCA.

Version 1.5.0

No issues have been closed in this release of DataSynapse HPCCA.

Version 1.4.0

No issues have been closed in this release of DataSynapse HPCCA.

Version 1.3.0

KEY	SUMMARY
GS-15344	When the GridLibrary Deployer was used without a driver.properties file, it threw a Malformed URL exception. The GridLibrary Deployer has been removed from this release.
GS-13281	A Null Pointer Exception appeared while editing the hook properties within the GridServer Administration tool. The adapter has been modified to fix this issue.

Version 1.2.0

Engine Key Summary

KEY	SUMMARY
GS-13246	The adapter previously updated the /etc/hosts file on Linux Engine VMs. There is no need to do this. By introducing the customizable images and startup scripting (or ARM Templates) the Engine VM is no longer modified by the adapter automatically. If you want to continue to perform this activity, you must include it in User Data or VM Extension scripting.

Version 1.1.0

Key Summary

KEY	SUMMARY
GS-13278	The Director Communication Port was not being set properly on standalone Brokers. A DIRECTORPORT property was created in the cloudprovider.properties file which explicitly sets this value rather than relying on the install.properties.

Known Issues

The following issue exists in this release of TIBCO DataSynapse™ High-Performance Computing Cloud Adapter. Key Summary and Workaround Summary

Key	Description
HPCCA-444	Summary: An unexpected error occurs on DataSynapse GridServer® UI while enabling and disabling the hook from the UI. Workaround: None.

TIBCO Documentation and Support Services

For information about this product, you can read the documentation, contact TIBCO Support, and join TIBCO Community.

How to Access TIBCO Documentation

Documentation for TIBCO products is available on the Product Documentation website, mainly in HTML and PDF formats. The Product Documentation website is updated frequently and is more current than any other documentation included with the product.

Product-Specific Documentation

The following documentation for this product is available on the TIBCO DataSynapse™ High-Performance Computing Cloud Adapter Product Documentation page:

How to Contact Support for TIBCO Products

You can contact the Support team in the following ways:

- To access the Support Knowledge Base and getting personalized content about products you are interested in, visit our product Support website.
- To create a Support case, you must have a valid maintenance or support contract with a Cloud Software Group entity. You also need a username and password to log in to the product Support website. If you do not have a username, you can request one by clicking Register on the website.

How to Join TIBCO Community

TIBCO Community is the official channel for TIBCO customers, partners, and employees subject matter experts to share and access their collective experience. TIBCO Community offers access to Q&A forums, product wikis, and best practices. It also offers access to extensions, adapters, solution accelerators, and tools that extend and enable customers to gain full value from TIBCO products. In addition, users can submit and vote on feature requests from within the TIBCO Ideas Portal. For a free registration, go to TIBCO Community.

Legal and Third-Party Notices

SOME CLOUD SOFTWARE GROUP, INC. ("CLOUD SG") SOFTWARE AND CLOUD SERVICESEMBED, BUNDLE, OR OTHERWISE INCLUDE OTHER SOFTWARE, INCLUDING OTHERCLOUD SG SOFTWARE (COLLECTIVELY, "INCLUDED SOFTWARE"). USE OF INCLUDED SOFTWARE IS SOLELY TO ENABLE THE FUNCTIONALITY (OR PROVIDE LIMITED ADD-ONFUNCTIONALITY) OF THE LICENSED CLOUD SG SOFTWARE AND/OR CLOUD SERVICES.THE INCLUDED SOFTWARE IS NOT LICENSED TO BE USED OR ACCESSED BY ANYOTHER CLOUD SG SOFTWARE AND/OR CLOUD SERVICES OR FOR ANY OTHERPURPOSE. USE OF CLOUD SG SOFTWARE AND CLOUD SERVICES IS SUBJECT TO THE TERMS ANDCONDITIONS OF AN AGREEMENT FOUND IN EITHER A SEPARATELY EXECUTEDAGREEMENT, OR, IF THERE IS NO SUCH SEPARATE AGREEMENT, THE CLICKWRAP ENDUSER AGREEMENT WHICH IS DISPLAYED WHEN ACCESSING, DOWNLOADING, ORINSTALLING THE SOFTWARE OR CLOUD SERVICES (AND WHICH IS DUPLICATED IN THELICENSE FILE) OR IF THERE IS NO SUCH LICENSE AGREEMENT OR CLICKWRAP ENDUSER AGREEMENT, THE LICENSE(S) LOCATED IN THE "LICENSE" FILE(S) OF THESOFTWARE. USE OF THIS DOCUMENT IS SUBJECT TO THOSE SAME TERMS ANDCONDITIONS, AND YOUR USE HEREOF SHALL CONSTITUTE ACCEPTANCE OF AND ANAGREEMENT TO BE BOUND BY THE SAME. This document is subject to U.S. and international copyright laws and treaties. No part of thisdocument may be reproduced in any form without the written authorization of Cloud SoftwareGroup, Inc. TIBCO, the TIBCO logo, the TIBCO O logo, DataSynapse, GridServer, DataSynapse Federator,FabricBroker, FabricServer, GridClient, LiveCluster, and SpeedLink are either registeredtrademarks or trademarks of Cloud Software Group, Inc. in the United States and/or othercountries. All other product and company names and marks mentioned in this document are the property oftheir respective owners and are mentioned for identification purposes only. You acknowledge thatall rights to these third party marks are the exclusive property of their respective owners. Pleaserefer to Cloud SG's Third Party Trademark Notices (<https://www.cloud.com/legal>) for moreinformation. This document includes fonts that are licensed under the SIL Open Font License, Version 1.1,which is available at: <https://scripts.sil.org/OFL> Copyright (c) Paul D. Hunt, with Reserved Font Name Source Sans Pro and Source Code Pro. Cloud SG software may be available on multiple operating systems. However, not all operatingsystem platforms for a specific software version are released at the same time. See the "readme"file for the availability of a specific version of Cloud SG software on a specific operating systemplatform. THIS DOCUMENT IS PROVIDED "AS IS" WITHOUT WARRANTY OF ANY KIND, EITHEREXPRESS OR IMPLIED, INCLUDING, BUT NOT LIMITED TO, THE IMPLIED WARRANTIES OFMERCHANTABILITY, FITNESS FOR A PARTICULAR PURPOSE, OR NON-INFRINGEMENT. THIS DOCUMENT COULD INCLUDE TECHNICAL INACCURACIES OR TYPOGRAPHICALERRORS. CHANGES ARE PERIODICALLY ADDED TO THE INFORMATION

HEREIN; THESE CHANGES WILL BE INCORPORATED IN NEW EDITIONS OF THIS DOCUMENT. CLOUD SG MAY MAKE IMPROVEMENTS AND/OR CHANGES IN THE PRODUCT(S), THE PROGRAM(S), AND/OR THE SERVICES DESCRIBED IN THIS DOCUMENT AT ANY TIME WITHOUT NOTICE. THE CONTENTS OF THIS DOCUMENT MAY BE MODIFIED AND/OR QUALIFIED, DIRECTLY OR INDIRECTLY, BY OTHER DOCUMENTATION WHICH ACCOMPANIES THIS SOFTWARE, INCLUDING BUT NOT LIMITED TO ANY RELEASE NOTES AND "README" FILES. This and other products of Cloud SG may be covered by registered patents. For details, please refer to the Virtual Patent Marking document located at <https://www.cloud.com/legal>. Copyright © 2001-2024. Cloud Software Group, Inc. All Rights Reserved.

New Features

The following features have been added since the last major release of TIBCO DataSynapse™ High-Performance Computing Cloud Adapter (HPCCA).

Version 2.1.0

Restarting HPCCA TIBCO DataSynapse™ High-Performance Computing Cloud Adapter can now restart, without restarting TIBCO DataSynapse GridServer® Manager for changes in cloudprovider.properties file. You must set the USE_HPPCA_AUTO_RESTART property present in cloudprovider.properties file to true. For more information, see TIBCO DataSynapse™ High-Performance Computing Cloud Adapter User Guide. VM batch termination for GCP By setting BATCH_VM_TERMINATION property to true in cloud provider, you can now terminate virtual machines in batch sizes. Park Engine feature for Aggressive Scale Down Using Park Engine feature, you can now mark engine daemon as a candidate to terminate, if busy engine count is less than or equal to MINIMUM_BUSY_ENGINE. This is based on value provided in MINIMUM_BUSY_ENGINE. For more information, see TIBCO DataSynapse™ High-Performance Computing Cloud Adapter User Guide.

Version 2.0.0

Support for multiple cloud providers DataSynapse HPCCA now supports engines for multiple cloud providers mentioned in the cloudprovider.properties file. For more information, see TIBCO DataSynapse™ High-Performance Computing Cloud Adapter User Guide. Aggressive scale down of engines If no task is running on the DataSynapse GridServer® Engine, DataSynapse HPCCA reduces the number of engines irrespective of the ENGINE_IDLE_TIMEOUT value. To enable this feature, set the AGGRESSIVE_SCALEDOWN property in the cloudprovider.properties file to true. For more information, see TIBCO DataSynapse™ High-Performance Computing Cloud Adapter User Guide. Monitoring engines on specific brokers DataSynapse HPCCA now monitors engines on particular brokers. A list of brokers is provided in the BROKER_HOSTNAME property in the cloudprovider.properties file. For more information, see TIBCO DataSynapse™ High-Performance Computing Cloud Adapter User Guide.

Version 1.5.0

No new features have been added in this release.

Version 1.4.0

Support for Google Cloud Platform Starting from this release, DataSynapse™High-Performance Computing CloudAdapter (HPCCA) can be configured for Google Cloud Platform (GCP) by using the `cloudprovider.properties` file. For more information, see TIBCO DataSynapse™High-Performance Computing Cloud Adapter User Guide. Consideration for DataSynapse HPCCA engines for calculating computational need Starting from this release, engines that are not created by DataSynapse HPCCA canbe included when calculating computational needs. To enable this feature, set the `CONSIDER_NON_HPCCA_ENGINES` property in the `cloudprovider.properties` file to true. Formore information, see TIBCO DataSynapse™High-Performance Computing CloudAdapter User Guide.

Version 1.3.0

Support for scale sets Scale sets that allow you to create and manage a group of identical, load balancedVMs on Azure are now supported for Windows and Linux 64-bit platforms.

Version 1.2.0

Support for custom images Custom images for both Windows and Linux 64-bit platforms are now supported onAWS and Azure. Support for auto scaling group Autoscaling groups for Windows and Linux 64-bit platforms are now supported onAWS. Grid Library Deployer A new feature to assist in deployment is a TIBCO-supported tool for deploying gridlibraries from the command line. The included `GridLibraryDeployer.zip` is a simple Java-based grid library deployment utility based on the `GridLibDeployer.java` class included inthe TIBCO DataSynapse GridServer® SDK. Enter `java -jar GridLibraryDeployer.jar` at thecommand line. A list of options is displayed. Support for SSL-Enabled DataSynapse GridServer® Manager DataSynapse HPCCA can now be installed on SSL-enabled managers. Earlierversions did not support SSL-enabled managers.

Version 1.1.0

Windows engines and initial reconfiguration changes The initial release of the DataSynapse HPCCA only included Linux-based engines. Itnow supports Windows engines. Also, the DataSynapse HPCCA now reconfigures an existing DataSynapseGridServer® Engine installation to enable it to connect to the current gridenvironment. This is done rather than the previous method of a fresh install, to enableyou to configure the virtual machine to properly connect into your infrastructure and toenable for the preinstallation of things like grid libraries and caching solutions.

Version 1.0.0

TIBCO DataSynapse™ High-Performance Computing Cloud Adapter DataSynapse HPCCA extends the functionality of DataSynapse GridServer® by enabling it to dynamically create virtual machines and provision them with the EngineDaemon. It was created to allow customers to temporarily increase their compute capacity during periods of unusually high load on their DataSynapse GridServer® deployment. The initial release, version 1.0.0, includes Linux 64-bit engines and a very simple cloud management algorithm.

Changes in Functionality

No changes have been made in Functionality as of this release of TIBCO DataSynapse™ High-Performance Computing Cloud Adapter.

Deprecated Features

No features have been deprecated as of this release of TIBCO DataSynapse™ High-Performance Computing Cloud Adapter.

Removed Features

No features have been removed as of this release of TIBCO DataSynapse™ High-Performance Computing Cloud Adapter.

Migration and Compatibility

The following information provides migration procedures and a compatibility matrix for this release of TIBCO DataSynapse™ High-Performance Computing Cloud Adapter.

Migrating to Version 2.1.0

Migration to version 2.1.0 from previous versions of DataSynapse™ High-Performance Computing Cloud Adapter (HPCCA) is not supported. For critical functionality or VM Images/AMIs that need to be used, contact TIBCO Support.

Closed Issues

The table lists closed issues since version 1.0.0 of TIBCO DataSynapse™ High-Performance Computing Cloud Adapter.

Version 2.1.0

No issues have been closed in this release of DataSynapse HPCCA.

Version 2.0.0

No issues have been closed in this release of DataSynapse HPCCA.

Version 1.5.0

No issues have been closed in this release of DataSynapse HPCCA.

Version 1.4.0

No issues have been closed in this release of DataSynapse HPCCA.

Version 1.3.0

KEY	SUMMARY
GS-15344	When the GridLibrary Deployer was used without a driver.properties file, it threw aMalformed URL exception. The GridLibrary Deployer has been removed fromthis release.
GS-13281	A Null Pointer Exception appeared while editing the hook properties within theGridServer Administration tool. The adapter has been modified to fix this issue.

Version 1.2.0

Engine Key Summary

KEY	SUMMARY
GS-13246	The adapter previously updated the /etc/hosts file on Linux Engine VMs. There is no need to do this. By introducing the customizable images and startup scripting (or ARM Templates) the Engine VM is no longer modified by the adapter automatically. If you want to continue to perform this activity, you must include it in User Data or VM Extension scripting.

Version 1.1.0

Key Summary

KEY	SUMMARY
GS-13278	The Director Communication Port was not being set properly on standalone Brokers. A DIRECTORPORT property was created in the cloudprovider.properties file which explicitly sets this value rather than relying on the install.properties.

Known Issues

The following issue exists in this release of TIBCO DataSynapse™ High-Performance Computing Cloud Adapter. Key Summary and Workaround Summary

Key	Description
HPCCA-444	Summary: An unexpected error occurs on DataSynapse GridServer® UI while enabling and disabling the hook from the UI. Workaround: None.

TIBCO Documentation and Support Services

For information about this product, you can read the documentation, contact TIBCO Support, and join TIBCO Community.

How to Access TIBCO Documentation

Documentation for TIBCO products is available on the Product Documentation website, mainly in HTML and PDF formats. The Product Documentation website is updated frequently and is more current than any other documentation included with the product.

Product-Specific Documentation

The following documentation for this product is available on the TIBCO DataSynapse™ High-Performance Computing Cloud Adapter Product Documentation page:

How to Contact Support for TIBCO Products

You can contact the Support team in the following ways:

- To access the Support Knowledge Base and getting personalized content about products you are interested in, visit our product Support website.
- To create a Support case, you must have a valid maintenance or support contract with a Cloud Software Group entity. You also need a username and password to log in to the product Support website. If you do not have a username, you can request one by clicking Register on the website.

How to Join TIBCO Community

TIBCO Community is the official channel for TIBCO customers, partners, and employees subject matter experts to share and access their collective experience. TIBCO Community offers access to Q&A forums, product wikis, and best practices. It also offers access to extensions, adapters, solution accelerators, and tools that extend and enable customers to gain full value from TIBCO products. In addition, users can submit and vote on feature requests from within the TIBCO Ideas Portal. For a free registration, go to TIBCO Community.

Legal and Third-Party Notices

SOME CLOUD SOFTWARE GROUP, INC. ("CLOUD SG") SOFTWARE AND CLOUD SERVICESEMBED, BUNDLE, OR OTHERWISE INCLUDE OTHER SOFTWARE, INCLUDING OTHERCLOUD SG SOFTWARE (COLLECTIVELY, "INCLUDED SOFTWARE"). USE OF INCLUDED SOFTWARE IS SOLELY TO ENABLE THE FUNCTIONALITY (OR PROVIDE LIMITED ADD-ONFUNCTIONALITY) OF THE LICENSED CLOUD SG SOFTWARE AND/OR CLOUD SERVICES.THE INCLUDED SOFTWARE IS NOT LICENSED TO BE USED OR ACCESSED BY ANYOTHER CLOUD SG SOFTWARE AND/OR CLOUD SERVICES OR FOR ANY OTHERPURPOSE. USE OF CLOUD SG SOFTWARE AND CLOUD SERVICES IS SUBJECT TO THE TERMS ANDCONDITIONS OF AN AGREEMENT FOUND IN EITHER A SEPARATELY EXECUTEDAGREEMENT, OR, IF THERE IS NO SUCH SEPARATE AGREEMENT, THE CLICKWRAP ENDUSER AGREEMENT WHICH IS DISPLAYED WHEN ACCESSING, DOWNLOADING, ORINSTALLING THE SOFTWARE OR CLOUD SERVICES (AND WHICH IS DUPLICATED IN THELICENSE FILE) OR IF THERE IS NO SUCH LICENSE AGREEMENT OR CLICKWRAP ENDUSER AGREEMENT, THE LICENSE(S) LOCATED IN THE "LICENSE" FILE(S) OF THESOFTWARE. USE OF THIS DOCUMENT IS SUBJECT TO THOSE SAME TERMS ANDCONDITIONS, AND YOUR USE HEREOF SHALL CONSTITUTE ACCEPTANCE OF AND ANAGREEMENT TO BE BOUND BY THE SAME. This document is subject to U.S. and international copyright laws and treaties. No part of thisdocument may be reproduced in any form without the written authorization of Cloud SoftwareGroup, Inc. TIBCO, the TIBCO logo, the TIBCO O logo, DataSynapse, GridServer, DataSynapse Federator,FabricBroker, FabricServer, GridClient, LiveCluster, and SpeedLink are either registeredtrademarks or trademarks of Cloud Software Group, Inc. in the United States and/or othercountries. All other product and company names and marks mentioned in this document are the property oftheir respective owners and are mentioned for identification purposes only. You acknowledge thatall rights to these third party marks are the exclusive property of their respective owners. Pleaserefer to Cloud SG's Third Party Trademark Notices (<https://www.cloud.com/legal>) for moreinformation. This document includes fonts that are licensed under the SIL Open Font License, Version 1.1,which is available at: <https://scripts.sil.org/OFL> Copyright (c) Paul D. Hunt, with Reserved Font Name Source Sans Pro and Source Code Pro. Cloud SG software may be available on multiple operating systems. However, not all operatingsystem platforms for a specific software version are released at the same time. See the "readme"file for the availability of a specific version of Cloud SG software on a specific operating systemplatform. THIS DOCUMENT IS PROVIDED "AS IS" WITHOUT WARRANTY OF ANY KIND, EITHEREXPRESS OR IMPLIED, INCLUDING, BUT NOT LIMITED TO, THE IMPLIED WARRANTIES OFMERCHANTABILITY, FITNESS FOR A PARTICULAR PURPOSE, OR NON-INFRINGEMENT. THIS DOCUMENT COULD INCLUDE TECHNICAL INACCURACIES OR TYPOGRAPHICALERRORS. CHANGES ARE PERIODICALLY ADDED TO THE INFORMATION

HEREIN; THESE CHANGES WILL BE INCORPORATED IN NEW EDITIONS OF THIS DOCUMENT. CLOUD SG MAY MAKE IMPROVEMENTS AND/OR CHANGES IN THE PRODUCT(S), THE PROGRAM(S), AND/OR THE SERVICES DESCRIBED IN THIS DOCUMENT AT ANY TIME WITHOUT NOTICE. THE CONTENTS OF THIS DOCUMENT MAY BE MODIFIED AND/OR QUALIFIED, DIRECTLY OR INDIRECTLY, BY OTHER DOCUMENTATION WHICH ACCOMPANIES THIS SOFTWARE, INCLUDING BUT NOT LIMITED TO ANY RELEASE NOTES AND "README" FILES. This and other products of Cloud SG may be covered by registered patents. For details, please refer to the Virtual Patent Marking document located at <https://www.cloud.com/legal>. Copyright © 2001-2024. Cloud Software Group, Inc. All Rights Reserved.

New Features

The following features have been added since the last major release of TIBCO DataSynapse™ High-Performance Computing Cloud Adapter (HPCCA).

Version 2.1.0

Restarting HPCCA TIBCO DataSynapse™ High-Performance Computing Cloud Adapter can now restart, without restarting TIBCO DataSynapse GridServer® Manager for changes in cloudprovider.properties file. You must set the USE_HPPCA_AUTO_RESTART property present in cloudprovider.properties file to true. For more information, see TIBCO DataSynapse™ High-Performance Computing Cloud Adapter User Guide. VM batch termination for GCP By setting BATCH_VM_TERMINATION property to true in cloud provider, you can now terminate virtual machines in batch sizes. Park Engine feature for Aggressive Scale Down Using Park Engine feature, you can now mark engine daemon as a candidate to terminate, if busy engine count is less than or equal to MINIMUM_BUSY_ENGINE. This is based on value provided in MINIMUM_BUSY_ENGINE. For more information, see TIBCO DataSynapse™ High-Performance Computing Cloud Adapter User Guide.

Version 2.0.0

Support for multiple cloud providers DataSynapse HPCCA now supports engines for multiple cloud providers mentioned in the cloudprovider.properties file. For more information, see TIBCO DataSynapse™ High-Performance Computing Cloud Adapter User Guide. Aggressive scale down of engines If no task is running on the DataSynapse GridServer® Engine, DataSynapse HPCCA reduces the number of engines irrespective of the ENGINE_IDLE_TIMEOUT value. To enable this feature, set the AGGRESSIVE_SCALEDOWN property in the cloudprovider.properties file to true. For more information, see TIBCO DataSynapse™ High-Performance Computing Cloud Adapter User Guide. Monitoring engines on specific brokers DataSynapse HPCCA now monitors engines on particular brokers. A list of brokers is provided in the BROKER_HOSTNAME property in the cloudprovider.properties file. For more information, see TIBCO DataSynapse™ High-Performance Computing Cloud Adapter User Guide.

Version 1.5.0

No new features have been added in this release.

Version 1.4.0

Support for Google Cloud Platform Starting from this release, DataSynapse™High-Performance Computing CloudAdapter (HPCCA) can be configured for Google Cloud Platform (GCP) by using the `cloudprovider.properties` file. For more information, see TIBCO DataSynapse™High-Performance Computing Cloud Adapter User Guide. Consideration for DataSynapse HPCCA engines for calculating computational need Starting from this release, engines that are not created by DataSynapse HPCCA canbe included when calculating computational needs. To enable this feature, set the `CONSIDER_NON_HPCCA_ENGINES` property in the `cloudprovider.properties` file to true. Formore information, see TIBCO DataSynapse™High-Performance Computing CloudAdapter User Guide.

Version 1.3.0

Support for scale sets Scale sets that allow you to create and manage a group of identical, load balancedVMs on Azure are now supported for Windows and Linux 64-bit platforms.

Version 1.2.0

Support for custom images Custom images for both Windows and Linux 64-bit platforms are now supported onAWS and Azure. Support for auto scaling group Autoscaling groups for Windows and Linux 64-bit platforms are now supported onAWS. Grid Library Deployer A new feature to assist in deployment is a TIBCO-supported tool for deploying gridlibraries from the command line. The included `GridLibraryDeployer.zip` is a simple Java-based grid library deployment utility based on the `GridLibDeployer.java` class included inthe TIBCO DataSynapse GridServer® SDK. Enter `java -jar GridLibraryDeployer.jar` at thecommand line. A list of options is displayed. Support for SSL-Enabled DataSynapse GridServer® Manager DataSynapse HPCCA can now be installed on SSL-enabled managers. Earlierversions did not support SSL-enabled managers.

Version 1.1.0

Windows engines and initial reconfiguration changes The initial release of the DataSynapse HPCCA only included Linux-based engines. Itnow supports Windows engines. Also, the DataSynapse HPCCA now reconfigures an existing DataSynapseGridServer® Engine installation to enable it to connect to the current gridenvironment. This is done rather than the previous method of a fresh install, to enableyou to configure the virtual machine to properly connect into your infrastructure and toenable for the preinstallation of things like grid libraries and caching solutions.

Version 1.0.0

TIBCO DataSynapse™ High-Performance Computing Cloud Adapter DataSynapse HPCCA extends the functionality of DataSynapse GridServer® by enabling it to dynamically create virtual machines and provision them with the EngineDaemon. It was created to allow customers to temporarily increase their compute capacity during periods of unusually high load on their DataSynapse GridServer® deployment. The initial release, version 1.0.0, includes Linux 64-bit engines and a very simple cloud management algorithm.

Changes in Functionality

No changes have been made in Functionality as of this release of TIBCO DataSynapse™ High-Performance Computing Cloud Adapter.

Deprecated Features

No features have been deprecated as of this release of TIBCO DataSynapse™ High-Performance Computing Cloud Adapter.

Removed Features

No features have been removed as of this release of TIBCO DataSynapse™ High-Performance Computing Cloud Adapter.

Migration and Compatibility

The following information provides migration procedures and a compatibility matrix for this release of TIBCO DataSynapse™ High-Performance Computing Cloud Adapter.

Migrating to Version 2.1.0

Migration to version 2.1.0 from previous versions of DataSynapse™ High-Performance Computing Cloud Adapter (HPCCA) is not supported. For critical functionality or VM Images/AMIs that need to be used, contact TIBCO Support.

Closed Issues

The table lists closed issues since version 1.0.0 of TIBCO DataSynapse™ High-Performance Computing Cloud Adapter.

Version 2.1.0

No issues have been closed in this release of DataSynapse HPCCA.

Version 2.0.0

No issues have been closed in this release of DataSynapse HPCCA.

Version 1.5.0

No issues have been closed in this release of DataSynapse HPCCA.

Version 1.4.0

No issues have been closed in this release of DataSynapse HPCCA.

Version 1.3.0

KEY	SUMMARY
GS-15344	When the GridLibrary Deployer was used without a driver.properties file, it threw a Malformed URL exception. The GridLibrary Deployer has been removed from this release.
GS-13281	A Null Pointer Exception appeared while editing the hook properties within the GridServer Administration tool. The adapter has been modified to fix this issue.

Version 1.2.0

Engine Key Summary

KEY	SUMMARY
GS-13246	The adapter previously updated the /etc/hosts file on Linux Engine VMs. There is no need to do this. By introducing the customizable images and startup scripting (or ARM Templates) the Engine VM is no longer modified by the adapter automatically. If you want to continue to perform this activity, you must include it in User Data or VM Extension scripting.

Version 1.1.0

Key Summary

KEY	SUMMARY
GS-13278	The Director Communication Port was not being set properly on standalone Brokers. A DIRECTORPORT property was created in the cloudprovider.properties file which explicitly sets this value rather than relying on the install.properties.

Known Issues

The following issue exists in this release of TIBCO DataSynapse™ High-Performance Computing Cloud Adapter. Key Summary and Workaround Summary

Key	Description
HPCCA-444	Summary: An unexpected error occurs on DataSynapse GridServer® UI while enabling and disabling the hook from the UI. Workaround: None.

TIBCO Documentation and Support Services

For information about this product, you can read the documentation, contact TIBCO Support, and join TIBCO Community.

How to Access TIBCO Documentation

Documentation for TIBCO products is available on the Product Documentation website, mainly in HTML and PDF formats. The Product Documentation website is updated frequently and is more current than any other documentation included with the product.

Product-Specific Documentation

The following documentation for this product is available on the TIBCO DataSynapse™ High-Performance Computing Cloud Adapter Product Documentation page:

How to Contact Support for TIBCO Products

You can contact the Support team in the following ways:

- To access the Support Knowledge Base and getting personalized content about products you are interested in, visit our product Support website.
- To create a Support case, you must have a valid maintenance or support contract with a Cloud Software Group entity. You also need a username and password to log in to the product Support website. If you do not have a username, you can request one by clicking Register on the website.

How to Join TIBCO Community

TIBCO Community is the official channel for TIBCO customers, partners, and employees subject matter experts to share and access their collective experience. TIBCO Community offers access to Q&A forums, product wikis, and best practices. It also offers access to extensions, adapters, solution accelerators, and tools that extend and enable customers to gain full value from TIBCO products. In addition, users can submit and vote on feature requests from within the TIBCO Ideas Portal. For a free registration, go to TIBCO Community.

Legal and Third-Party Notices

SOME CLOUD SOFTWARE GROUP, INC. ("CLOUD SG") SOFTWARE AND CLOUD SERVICESEMBED, BUNDLE, OR OTHERWISE INCLUDE OTHER SOFTWARE, INCLUDING OTHERCLOUD SG SOFTWARE (COLLECTIVELY, "INCLUDED SOFTWARE"). USE OF INCLUDEDSOFTWARE IS SOLELY TO ENABLE THE FUNCTIONALITY (OR PROVIDE LIMITED ADD-ONFUNCTIONALITY) OF THE LICENSED CLOUD SG SOFTWARE AND/OR CLOUD SERVICES.THE INCLUDED SOFTWARE IS NOT LICENSED TO BE USED OR ACCESSED BY ANYOTHER CLOUD SG SOFTWARE AND/OR CLOUD SERVICES OR FOR ANY OTHERPURPOSE. USE OF CLOUD SG SOFTWARE AND CLOUD SERVICES IS SUBJECT TO THE TERMS ANDCONDITIONS OF AN AGREEMENT FOUND IN EITHER A SEPARATELY EXECUTEDAGREEMENT, OR, IF THERE IS NO SUCH SEPARATE AGREEMENT, THE CLICKWRAP ENDUSER AGREEMENT WHICH IS DISPLAYED WHEN ACCESSING, DOWNLOADING, ORINSTALLING THE SOFTWARE OR CLOUD SERVICES (AND WHICH IS DUPLICATED IN THELICENSE FILE) OR IF THERE IS NO SUCH LICENSE AGREEMENT OR CLICKWRAP ENDUSER AGREEMENT, THE LICENSE(S) LOCATED IN THE "LICENSE" FILE(S) OF THESOFTWARE. USE OF THIS DOCUMENT IS SUBJECT TO THOSE SAME TERMS ANDCONDITIONS, AND YOUR USE HEREOF SHALL CONSTITUTE ACCEPTANCE OF AND ANAGREEMENT TO BE BOUND BY THE SAME. This document is subject to U.S. and international copyright laws and treaties. No part of thisdocument may be reproduced in any form without the written authorization of Cloud SoftwareGroup, Inc. TIBCO, the TIBCO logo, the TIBCO O logo, DataSynapse, GridServer, DataSynapse Federator,FabricBroker, FabricServer, GridClient, LiveCluster, and SpeedLink are either registeredtrademarks or trademarks of Cloud Software Group, Inc. in the United States and/or othercountries. All other product and company names and marks mentioned in this document are the property oftheir respective owners and are mentioned for identification purposes only. You acknowledge thatall rights to these third party marks are the exclusive property of their respective owners. Pleaserefer to Cloud SG's Third Party Trademark Notices (<https://www.cloud.com/legal>) for moreinformation. This document includes fonts that are licensed under the SIL Open Font License, Version 1.1,which is available at: <https://scripts.sil.org/OFL> Copyright (c) Paul D. Hunt, with Reserved Font Name Source Sans Pro and Source Code Pro. Cloud SG software may be available on multiple operating systems. However, not all operatingsystem platforms for a specific software version are released at the same time. See the "readme"file for the availability of a specific version of Cloud SG software on a specific operating systemplatform. THIS DOCUMENT IS PROVIDED "AS IS" WITHOUT WARRANTY OF ANY KIND, EITHEREXPRESS OR IMPLIED, INCLUDING, BUT NOT LIMITED TO, THE IMPLIED WARRANTIES OFMERCHANTABILITY, FITNESS FOR A PARTICULAR PURPOSE, OR NON-INFRINGEMENT. THIS DOCUMENT COULD INCLUDE TECHNICAL INACCURACIES OR TYPOGRAPHICALERRORS. CHANGES ARE PERIODICALLY ADDED TO THE INFORMATION

HEREIN; THESE CHANGES WILL BE INCORPORATED IN NEW EDITIONS OF THIS DOCUMENT. CLOUD SG MAY MAKE IMPROVEMENTS AND/OR CHANGES IN THE PRODUCT(S), THE PROGRAM(S), AND/OR THE SERVICES DESCRIBED IN THIS DOCUMENT AT ANY TIME WITHOUT NOTICE. THE CONTENTS OF THIS DOCUMENT MAY BE MODIFIED AND/OR QUALIFIED, DIRECTLY OR INDIRECTLY, BY OTHER DOCUMENTATION WHICH ACCOMPANIES THIS SOFTWARE, INCLUDING BUT NOT LIMITED TO ANY RELEASE NOTES AND "README" FILES. This and other products of Cloud SG may be covered by registered patents. For details, please refer to the Virtual Patent Marking document located at <https://www.cloud.com/legal>. Copyright © 2001-2024. Cloud Software Group, Inc. All Rights Reserved.

New Features

The following features have been added since the last major release of TIBCO DataSynapse™ High-Performance Computing Cloud Adapter (HPCCA).

Version 2.1.0

Restarting HPCCA TIBCO DataSynapse™ High-Performance Computing Cloud Adapter can now restart, without restarting TIBCO DataSynapse GridServer® Manager for changes in cloudprovider.properties file. You must set the USE_HPPCA_AUTO_RESTART property present in cloudprovider.properties file to true. For more information, see TIBCO DataSynapse™ High-Performance Computing Cloud Adapter User Guide. VM batch termination for GCP By setting BATCH_VM_TERMINATION property to true in cloud provider, you can now terminate virtual machines in batch sizes. Park Engine feature for Aggressive Scale Down Using Park Engine feature, you can now mark engine daemon as a candidate to terminate, if busy engine count is less than or equal to MINIMUM_BUSY_ENGINE. This is based on value provided in MINIMUM_BUSY_ENGINE. For more information, see TIBCO DataSynapse™ High-Performance Computing Cloud Adapter User Guide.

Version 2.0.0

Support for multiple cloud providers DataSynapse HPCCA now supports engines for multiple cloud providers mentioned in the cloudprovider.properties file. For more information, see TIBCO DataSynapse™ High-Performance Computing Cloud Adapter User Guide. Aggressive scale down of engines If no task is running on the DataSynapse GridServer® Engine, DataSynapse HPCCA reduces the number of engines irrespective of the ENGINE_IDLE_TIMEOUT value. To enable this feature, set the AGGRESSIVE_SCALEDOWN property in the cloudprovider.properties file to true. For more information, see TIBCO DataSynapse™ High-Performance Computing Cloud Adapter User Guide. Monitoring engines on specific brokers DataSynapse HPCCA now monitors engines on particular brokers. A list of brokers is provided in the BROKER_HOSTNAME property in the cloudprovider.properties file. For more information, see TIBCO DataSynapse™ High-Performance Computing Cloud Adapter User Guide.

Version 1.5.0

No new features have been added in this release.

Version 1.4.0

Support for Google Cloud Platform Starting from this release, DataSynapse™High-Performance Computing CloudAdapter (HPCCA) can be configured for Google Cloud Platform (GCP) by using the `cloudprovider.properties` file. For more information, see TIBCO DataSynapse™High-Performance Computing Cloud Adapter User Guide. Consideration for DataSynapse HPCCA engines for calculating computational need Starting from this release, engines that are not created by DataSynapse HPCCA canbe included when calculating computational needs. To enable this feature, set the `CONSIDER_NON_HPCCA_ENGINES` property in the `cloudprovider.properties` file to true. Formore information, see TIBCO DataSynapse™High-Performance Computing CloudAdapter User Guide.

Version 1.3.0

Support for scale sets Scale sets that allow you to create and manage a group of identical, load balancedVMs on Azure are now supported for Windows and Linux 64-bit platforms.

Version 1.2.0

Support for custom images Custom images for both Windows and Linux 64-bit platforms are now supported onAWS and Azure. Support for auto scaling group Autoscaling groups for Windows and Linux 64-bit platforms are now supported onAWS. Grid Library Deployer A new feature to assist in deployment is a TIBCO-supported tool for deploying gridlibraries from the command line. The included `GridLibraryDeployer.zip` is a simple Java-based grid library deployment utility based on the `GridLibDeployer.java` class included inthe TIBCO DataSynapse GridServer® SDK. Enter `java -jar GridLibraryDeployer.jar` at thecommand line. A list of options is displayed. Support for SSL-Enabled DataSynapse GridServer® Manager DataSynapse HPCCA can now be installed on SSL-enabled managers. Earlierversions did not support SSL-enabled managers.

Version 1.1.0

Windows engines and initial reconfiguration changes The initial release of the DataSynapse HPCCA only included Linux-based engines. Itnow supports Windows engines. Also, the DataSynapse HPCCA now reconfigures an existing DataSynapseGridServer® Engine installation to enable it to connect to the current gridenvironment. This is done rather than the previous method of a fresh install, to enableyou to configure the virtual machine to properly connect into your infrastructure and toenable for the preinstallation of things like grid libraries and caching solutions.

Version 1.0.0

TIBCO DataSynapse™ High-Performance Computing Cloud Adapter DataSynapse HPCCA extends the functionality of DataSynapse GridServer® by enabling it to dynamically create virtual machines and provision them with the EngineDaemon. It was created to allow customers to temporarily increase their compute capacity during periods of unusually high load on their DataSynapse GridServer® deployment. The initial release, version 1.0.0, includes Linux 64-bit engines and a very simple cloud management algorithm.

Changes in Functionality

No changes have been made in Functionality as of this release of TIBCO DataSynapse™ High-Performance Computing Cloud Adapter.

Deprecated Features

No features have been deprecated as of this release of TIBCO DataSynapse™ High-Performance Computing Cloud Adapter.

Removed Features

No features have been removed as of this release of TIBCO DataSynapse™ High-Performance Computing Cloud Adapter.

Migration and Compatibility

The following information provides migration procedures and a compatibility matrix for this release of TIBCO DataSynapse™ High-Performance Computing Cloud Adapter.

Migrating to Version 2.1.0

Migration to version 2.1.0 from previous versions of DataSynapse™ High-Performance Computing Cloud Adapter (HPCCA) is not supported. For critical functionality or VM Images/AMIs that need to be used, contact TIBCO Support.

Closed Issues

The table lists closed issues since version 1.0.0 of TIBCO DataSynapse™ High-Performance Computing Cloud Adapter.

Version 2.1.0

No issues have been closed in this release of DataSynapse HPCCA.

Version 2.0.0

No issues have been closed in this release of DataSynapse HPCCA.

Version 1.5.0

No issues have been closed in this release of DataSynapse HPCCA.

Version 1.4.0

No issues have been closed in this release of DataSynapse HPCCA.

Version 1.3.0

KEY	SUMMARY
GS-15344	When the GridLibrary Deployer was used without a driver.properties file, it threw a Malformed URL exception. The GridLibrary Deployer has been removed from this release.
GS-13281	A Null Pointer Exception appeared while editing the hook properties within the GridServer Administration tool. The adapter has been modified to fix this issue.

Version 1.2.0

Engine Key Summary

KEY	SUMMARY
GS-13246	The adapter previously updated the /etc/hosts file on Linux Engine VMs. There is no need to do this. By introducing the customizable images and startup scripting (or ARM Templates) the Engine VM is no longer modified by the adapter automatically. If you want to continue to perform this activity, you must include it in User Data or VM Extension scripting.

Version 1.1.0

Key Summary

KEY	SUMMARY
GS-13278	The Director Communication Port was not being set properly on standalone Brokers. A DIRECTORPORT property was created in the cloudprovider.properties file which explicitly sets this value rather than relying on the install.properties.

Known Issues

The following issue exists in this release of TIBCO DataSynapse™ High-Performance Computing Cloud Adapter. Key Summary and Workaround Summary

Key	Description
HPCCA-444	Summary: An unexpected error occurs on DataSynapse GridServer® UI while enabling and disabling the hook from the UI. Workaround: None.

TIBCO Documentation and Support Services

For information about this product, you can read the documentation, contact TIBCO Support, and join TIBCO Community.

How to Access TIBCO Documentation

Documentation for TIBCO products is available on the Product Documentation website, mainly in HTML and PDF formats. The Product Documentation website is updated frequently and is more current than any other documentation included with the product.

Product-Specific Documentation

The following documentation for this product is available on the TIBCO DataSynapse™ High-Performance Computing Cloud Adapter Product Documentation page:

How to Contact Support for TIBCO Products

You can contact the Support team in the following ways:

- To access the Support Knowledge Base and getting personalized content about products you are interested in, visit our product Support website.
- To create a Support case, you must have a valid maintenance or support contract with a Cloud Software Group entity. You also need a username and password to log in to the product Support website. If you do not have a username, you can request one by clicking Register on the website.

How to Join TIBCO Community

TIBCO Community is the official channel for TIBCO customers, partners, and employees subject matter experts to share and access their collective experience. TIBCO Community offers access to Q&A forums, product wikis, and best practices. It also offers access to extensions, adapters, solution accelerators, and tools that extend and enable customers to gain full value from TIBCO products. In addition, users can submit and vote on feature requests from within the TIBCO Ideas Portal. For a free registration, go to TIBCO Community.

Legal and Third-Party Notices

SOME CLOUD SOFTWARE GROUP, INC. ("CLOUD SG") SOFTWARE AND CLOUD SERVICESEMBED, BUNDLE, OR OTHERWISE INCLUDE OTHER SOFTWARE, INCLUDING OTHERCLOUD SG SOFTWARE (COLLECTIVELY, "INCLUDED SOFTWARE"). USE OF INCLUDEDSOFTWARE IS SOLELY TO ENABLE THE FUNCTIONALITY (OR PROVIDE LIMITED ADD-ONFUNCTIONALITY) OF THE LICENSED CLOUD SG SOFTWARE AND/OR CLOUD SERVICES.THE INCLUDED SOFTWARE IS NOT LICENSED TO BE USED OR ACCESSED BY ANYOTHER CLOUD SG SOFTWARE AND/OR CLOUD SERVICES OR FOR ANY OTHERPURPOSE. USE OF CLOUD SG SOFTWARE AND CLOUD SERVICES IS SUBJECT TO THE TERMS ANDCONDITIONS OF AN AGREEMENT FOUND IN EITHER A SEPARATELY EXECUTEDAGREEMENT, OR, IF THERE IS NO SUCH SEPARATE AGREEMENT, THE CLICKWRAP ENDUSER AGREEMENT WHICH IS DISPLAYED WHEN ACCESSING, DOWNLOADING, ORINSTALLING THE SOFTWARE OR CLOUD SERVICES (AND WHICH IS DUPLICATED IN THELICENSE FILE) OR IF THERE IS NO SUCH LICENSE AGREEMENT OR CLICKWRAP ENDUSER AGREEMENT, THE LICENSE(S) LOCATED IN THE "LICENSE" FILE(S) OF THESOFTWARE. USE OF THIS DOCUMENT IS SUBJECT TO THOSE SAME TERMS ANDCONDITIONS, AND YOUR USE HEREOF SHALL CONSTITUTE ACCEPTANCE OF AND ANAGREEMENT TO BE BOUND BY THE SAME. This document is subject to U.S. and international copyright laws and treaties. No part of thisdocument may be reproduced in any form without the written authorization of Cloud SoftwareGroup, Inc. TIBCO, the TIBCO logo, the TIBCO O logo, DataSynapse, GridServer, DataSynapse Federator,FabricBroker, FabricServer, GridClient, LiveCluster, and SpeedLink are either registeredtrademarks or trademarks of Cloud Software Group, Inc. in the United States and/or othercountries. All other product and company names and marks mentioned in this document are the property oftheir respective owners and are mentioned for identification purposes only. You acknowledge thatall rights to these third party marks are the exclusive property of their respective owners. Pleaserefer to Cloud SG's Third Party Trademark Notices (<https://www.cloud.com/legal>) for moreinformation. This document includes fonts that are licensed under the SIL Open Font License, Version 1.1,which is available at: <https://scripts.sil.org/OFL> Copyright (c) Paul D. Hunt, with Reserved Font Name Source Sans Pro and Source Code Pro. Cloud SG software may be available on multiple operating systems. However, not all operatingsystem platforms for a specific software version are released at the same time. See the "readme"file for the availability of a specific version of Cloud SG software on a specific operating systemplatform. THIS DOCUMENT IS PROVIDED "AS IS" WITHOUT WARRANTY OF ANY KIND, EITHEREXPRESS OR IMPLIED, INCLUDING, BUT NOT LIMITED TO, THE IMPLIED WARRANTIES OFMERCHANTABILITY, FITNESS FOR A PARTICULAR PURPOSE, OR NON-INFRINGEMENT. THIS DOCUMENT COULD INCLUDE TECHNICAL INACCURACIES OR TYPOGRAPHICALERRORS. CHANGES ARE PERIODICALLY ADDED TO THE INFORMATION

HEREIN; THESE CHANGES WILL BE INCORPORATED IN NEW EDITIONS OF THIS DOCUMENT. CLOUD SG MAY MAKE IMPROVEMENTS AND/OR CHANGES IN THE PRODUCT(S), THE PROGRAM(S), AND/OR THE SERVICES DESCRIBED IN THIS DOCUMENT AT ANY TIME WITHOUT NOTICE. THE CONTENTS OF THIS DOCUMENT MAY BE MODIFIED AND/OR QUALIFIED, DIRECTLY OR INDIRECTLY, BY OTHER DOCUMENTATION WHICH ACCOMPANIES THIS SOFTWARE, INCLUDING BUT NOT LIMITED TO ANY RELEASE NOTES AND "README" FILES. This and other products of Cloud SG may be covered by registered patents. For details, please refer to the Virtual Patent Marking document located at <https://www.cloud.com/legal>. Copyright © 2001-2024. Cloud Software Group, Inc. All Rights Reserved.

New Features

The following features have been added since the last major release of TIBCO DataSynapse™ High-Performance Computing Cloud Adapter (HPCCA).

Version 2.1.0

Restarting HPCCA TIBCO DataSynapse™ High-Performance Computing Cloud Adapter can now restart, without restarting TIBCO DataSynapse GridServer® Manager for changes in cloudprovider.properties file. You must set the USE_HPPCA_AUTO_RESTART property present in cloudprovider.properties file to true. For more information, see TIBCO DataSynapse™ High-Performance Computing Cloud Adapter User Guide. VM batch termination for GCP By setting BATCH_VM_TERMINATION property to true in cloud provider, you can now terminate virtual machines in batch sizes. Park Engine feature for Aggressive Scale Down Using Park Engine feature, you can now mark engine daemon as a candidate to terminate, if busy engine count is less than or equal to MINIMUM_BUSY_ENGINE. This is based on value provided in MINIMUM_BUSY_ENGINE. For more information, see TIBCO DataSynapse™ High-Performance Computing Cloud Adapter User Guide.

Version 2.0.0

Support for multiple cloud providers DataSynapse HPCCA now supports engines for multiple cloud providers mentioned in the cloudprovider.properties file. For more information, see TIBCO DataSynapse™ High-Performance Computing Cloud Adapter User Guide. Aggressive scale down of engines If no task is running on the DataSynapse GridServer® Engine, DataSynapse HPCCA reduces the number of engines irrespective of the ENGINE_IDLE_TIMEOUT value. To enable this feature, set the AGGRESSIVE_SCALEDOWN property in the cloudprovider.properties file to true. For more information, see TIBCO DataSynapse™ High-Performance Computing Cloud Adapter User Guide. Monitoring engines on specific brokers DataSynapse HPCCA now monitors engines on particular brokers. A list of brokers is provided in the BROKER_HOSTNAME property in the cloudprovider.properties file. For more information, see TIBCO DataSynapse™ High-Performance Computing Cloud Adapter User Guide.

Version 1.5.0

No new features have been added in this release.

Version 1.4.0

Support for Google Cloud Platform Starting from this release, DataSynapse™High-Performance Computing CloudAdapter (HPCCA) can be configured for Google Cloud Platform (GCP) by using the `cloudprovider.properties` file. For more information, see TIBCO DataSynapse™High-Performance Computing Cloud Adapter User Guide. Consideration for DataSynapse HPCCA engines for calculating computational need Starting from this release, engines that are not created by DataSynapse HPCCA canbe included when calculating computational needs. To enable this feature, set the `CONSIDER_NON_HPCCA_ENGINES` property in the `cloudprovider.properties` file to true. Formore information, see TIBCO DataSynapse™High-Performance Computing CloudAdapter User Guide.

Version 1.3.0

Support for scale sets Scale sets that allow you to create and manage a group of identical, load balancedVMs on Azure are now supported for Windows and Linux 64-bit platforms.

Version 1.2.0

Support for custom images Custom images for both Windows and Linux 64-bit platforms are now supported onAWS and Azure. Support for auto scaling group Autoscaling groups for Windows and Linux 64-bit platforms are now supported onAWS. Grid Library Deployer A new feature to assist in deployment is a TIBCO-supported tool for deploying gridlibraries from the command line. The included `GridLibraryDeployer.zip` is a simple Java-based grid library deployment utility based on the `GridLibDeployer.java` class included inthe TIBCO DataSynapse GridServer® SDK. Enter `java -jar GridLibraryDeployer.jar` at thecommand line. A list of options is displayed. Support for SSL-Enabled DataSynapse GridServer® Manager DataSynapse HPCCA can now be installed on SSL-enabled managers. Earlierversions did not support SSL-enabled managers.

Version 1.1.0

Windows engines and initial reconfiguration changes The initial release of the DataSynapse HPCCA only included Linux-based engines. Itnow supports Windows engines. Also, the DataSynapse HPCCA now reconfigures an existing DataSynapseGridServer® Engine installation to enable it to connect to the current gridenvironment. This is done rather than the previous method of a fresh install, to enableyou to configure the virtual machine to properly connect into your infrastructure and toenable for the preinstallation of things like grid libraries and caching solutions.

Version 1.0.0

TIBCO DataSynapse™ High-Performance Computing Cloud Adapter DataSynapse HPCCA extends the functionality of DataSynapse GridServer® by enabling it to dynamically create virtual machines and provision them with the EngineDaemon. It was created to allow customers to temporarily increase their compute capacity during periods of unusually high load on their DataSynapse GridServer® deployment. The initial release, version 1.0.0, includes Linux 64-bit engines and a very simple cloud management algorithm.

Changes in Functionality

No changes have been made in Functionality as of this release of TIBCO DataSynapse™ High-Performance Computing Cloud Adapter.

Deprecated Features

No features have been deprecated as of this release of TIBCO DataSynapse™ High-Performance Computing Cloud Adapter.

Removed Features

No features have been removed as of this release of TIBCO DataSynapse™ High-Performance Computing Cloud Adapter.

Migration and Compatibility

The following information provides migration procedures and a compatibility matrix for this release of TIBCO DataSynapse™ High-Performance Computing Cloud Adapter.

Migrating to Version 2.1.0

Migration to version 2.1.0 from previous versions of DataSynapse™ High-Performance Computing Cloud Adapter (HPCCA) is not supported. For critical functionality or VM Images/AMIs that need to be used, contact TIBCO Support.

Closed Issues

The table lists closed issues since version 1.0.0 of TIBCO DataSynapse™ High-Performance Computing Cloud Adapter.

Version 2.1.0

No issues have been closed in this release of DataSynapse HPCCA.

Version 2.0.0

No issues have been closed in this release of DataSynapse HPCCA.

Version 1.5.0

No issues have been closed in this release of DataSynapse HPCCA.

Version 1.4.0

No issues have been closed in this release of DataSynapse HPCCA.

Version 1.3.0

KEY	SUMMARY
GS-15344	When the GridLibrary Deployer was used without a driver.properties file, it threw a Malformed URL exception. The GridLibrary Deployer has been removed from this release.
GS-13281	A Null Pointer Exception appeared while editing the hook properties within the GridServer Administration tool. The adapter has been modified to fix this issue.

Version 1.2.0

Engine Key Summary

KEY	SUMMARY
GS-13246	The adapter previously updated the /etc/hosts file on Linux Engine VMs. There is no need to do this. By introducing the customizable images and startup scripting (or ARM Templates) the Engine VM is no longer modified by the adapter automatically. If you want to continue to perform this activity, you must include it in User Data or VM Extension scripting.

Version 1.1.0

Key Summary

KEY	SUMMARY
GS-13278	The Director Communication Port was not being set properly on standalone Brokers. A DIRECTORPORT property was created in the cloudprovider.properties file which explicitly sets this value rather than relying on the install.properties.

Known Issues

The following issue exists in this release of TIBCO DataSynapse™ High-Performance Computing Cloud Adapter. Key Summary and Workaround Summary

Key	Description
HPCCA-444	Summary: An unexpected error occurs on DataSynapse GridServer® UI while enabling and disabling the hook from the UI. Workaround: None.

TIBCO Documentation and Support Services

For information about this product, you can read the documentation, contact TIBCO Support, and join TIBCO Community.

How to Access TIBCO Documentation

Documentation for TIBCO products is available on the Product Documentation website, mainly in HTML and PDF formats. The Product Documentation website is updated frequently and is more current than any other documentation included with the product.

Product-Specific Documentation

The following documentation for this product is available on the TIBCO DataSynapse™ High-Performance Computing Cloud Adapter Product Documentation page:

How to Contact Support for TIBCO Products

You can contact the Support team in the following ways:

- To access the Support Knowledge Base and getting personalized content about products you are interested in, visit our product Support website.
- To create a Support case, you must have a valid maintenance or support contract with a Cloud Software Group entity. You also need a username and password to log in to the product Support website. If you do not have a username, you can request one by clicking Register on the website.

How to Join TIBCO Community

TIBCO Community is the official channel for TIBCO customers, partners, and employees subject matter experts to share and access their collective experience. TIBCO Community offers access to Q&A forums, product wikis, and best practices. It also offers access to extensions, adapters, solution accelerators, and tools that extend and enable customers to gain full value from TIBCO products. In addition, users can submit and vote on feature requests from within the TIBCO Ideas Portal. For a free registration, go to TIBCO Community.

Legal and Third-Party Notices

SOME CLOUD SOFTWARE GROUP, INC. ("CLOUD SG") SOFTWARE AND CLOUD SERVICESEMBED, BUNDLE, OR OTHERWISE INCLUDE OTHER SOFTWARE, INCLUDING OTHERCLOUD SG SOFTWARE (COLLECTIVELY, "INCLUDED SOFTWARE"). USE OF INCLUDEDSOFTWARE IS SOLELY TO ENABLE THE FUNCTIONALITY (OR PROVIDE LIMITED ADD-ONFUNCTIONALITY) OF THE LICENSED CLOUD SG SOFTWARE AND/OR CLOUD SERVICES.THE INCLUDED SOFTWARE IS NOT LICENSED TO BE USED OR ACCESSED BY ANYOTHER CLOUD SG SOFTWARE AND/OR CLOUD SERVICES OR FOR ANY OTHERPURPOSE. USE OF CLOUD SG SOFTWARE AND CLOUD SERVICES IS SUBJECT TO THE TERMS ANDCONDITIONS OF AN AGREEMENT FOUND IN EITHER A SEPARATELY EXECUTEDAGREEMENT, OR, IF THERE IS NO SUCH SEPARATE AGREEMENT, THE CLICKWRAP ENDUSER AGREEMENT WHICH IS DISPLAYED WHEN ACCESSING, DOWNLOADING, ORINSTALLING THE SOFTWARE OR CLOUD SERVICES (AND WHICH IS DUPLICATED IN THELICENSE FILE) OR IF THERE IS NO SUCH LICENSE AGREEMENT OR CLICKWRAP ENDUSER AGREEMENT, THE LICENSE(S) LOCATED IN THE "LICENSE" FILE(S) OF THESOFTWARE. USE OF THIS DOCUMENT IS SUBJECT TO THOSE SAME TERMS ANDCONDITIONS, AND YOUR USE HEREOF SHALL CONSTITUTE ACCEPTANCE OF AND ANAGREEMENT TO BE BOUND BY THE SAME. This document is subject to U.S. and international copyright laws and treaties. No part of thisdocument may be reproduced in any form without the written authorization of Cloud SoftwareGroup, Inc. TIBCO, the TIBCO logo, the TIBCO O logo, DataSynapse, GridServer, DataSynapse Federator,FabricBroker, FabricServer, GridClient, LiveCluster, and SpeedLink are either registeredtrademarks or trademarks of Cloud Software Group, Inc. in the United States and/or othercountries. All other product and company names and marks mentioned in this document are the property oftheir respective owners and are mentioned for identification purposes only. You acknowledge thatall rights to these third party marks are the exclusive property of their respective owners. Pleaserefer to Cloud SG's Third Party Trademark Notices (<https://www.cloud.com/legal>) for moreinformation. This document includes fonts that are licensed under the SIL Open Font License, Version 1.1,which is available at: <https://scripts.sil.org/OFL> Copyright (c) Paul D. Hunt, with Reserved Font Name Source Sans Pro and Source Code Pro. Cloud SG software may be available on multiple operating systems. However, not all operatingsystem platforms for a specific software version are released at the same time. See the "readme"file for the availability of a specific version of Cloud SG software on a specific operating systemplatform. THIS DOCUMENT IS PROVIDED "AS IS" WITHOUT WARRANTY OF ANY KIND, EITHEREXPRESS OR IMPLIED, INCLUDING, BUT NOT LIMITED TO, THE IMPLIED WARRANTIES OFMERCHANTABILITY, FITNESS FOR A PARTICULAR PURPOSE, OR NON-INFRINGEMENT. THIS DOCUMENT COULD INCLUDE TECHNICAL INACCURACIES OR TYPOGRAPHICALERRORS. CHANGES ARE PERIODICALLY ADDED TO THE INFORMATION

HEREIN; THESE CHANGES WILL BE INCORPORATED IN NEW EDITIONS OF THIS DOCUMENT. CLOUD SG MAY MAKE IMPROVEMENTS AND/OR CHANGES IN THE PRODUCT(S), THE PROGRAM(S), AND/OR THE SERVICES DESCRIBED IN THIS DOCUMENT AT ANY TIME WITHOUT NOTICE. THE CONTENTS OF THIS DOCUMENT MAY BE MODIFIED AND/OR QUALIFIED, DIRECTLY OR INDIRECTLY, BY OTHER DOCUMENTATION WHICH ACCOMPANIES THIS SOFTWARE, INCLUDING BUT NOT LIMITED TO ANY RELEASE NOTES AND "README" FILES. This and other products of Cloud SG may be covered by registered patents. For details, please refer to the Virtual Patent Marking document located at <https://www.cloud.com/legal>. Copyright © 2001-2024. Cloud Software Group, Inc. All Rights Reserved.

New Features

The following features have been added since the last major release of TIBCO DataSynapse™ High-Performance Computing Cloud Adapter (HPCCA).

Version 2.1.0

Restarting HPCCA TIBCO DataSynapse™ High-Performance Computing Cloud Adapter can now restart, without restarting TIBCO DataSynapse GridServer® Manager for changes in cloudprovider.properties file. You must set the USE_HPPCA_AUTO_RESTART property present in cloudprovider.properties file to true. For more information, see TIBCO DataSynapse™ High-Performance Computing Cloud Adapter User Guide. VM batch termination for GCP By setting BATCH_VM_TERMINATION property to true in cloud provider, you can now terminate virtual machines in batch sizes. Park Engine feature for Aggressive Scale Down Using Park Engine feature, you can now mark engine daemon as a candidate to terminate, if busy engine count is less than or equal to MINIMUM_BUSY_ENGINE. This is based on value provided in MINIMUM_BUSY_ENGINE. For more information, see TIBCO DataSynapse™ High-Performance Computing Cloud Adapter User Guide.

Version 2.0.0

Support for multiple cloud providers DataSynapse HPCCA now supports engines for multiple cloud providers mentioned in the cloudprovider.properties file. For more information, see TIBCO DataSynapse™ High-Performance Computing Cloud Adapter User Guide. Aggressive scale down of engines If no task is running on the DataSynapse GridServer® Engine, DataSynapse HPCCA reduces the number of engines irrespective of the ENGINE_IDLE_TIMEOUT value. To enable this feature, set the AGGRESSIVE_SCALEDOWN property in the cloudprovider.properties file to true. For more information, see TIBCO DataSynapse™ High-Performance Computing Cloud Adapter User Guide. Monitoring engines on specific brokers DataSynapse HPCCA now monitors engines on particular brokers. A list of brokers is provided in the BROKER_HOSTNAME property in the cloudprovider.properties file. For more information, see TIBCO DataSynapse™ High-Performance Computing Cloud Adapter User Guide.

Version 1.5.0

No new features have been added in this release.

Version 1.4.0

Support for Google Cloud Platform Starting from this release, DataSynapse™High-Performance Computing CloudAdapter (HPCCA) can be configured for Google Cloud Platform (GCP) by using the `cloudprovider.properties` file. For more information, see TIBCO DataSynapse™High-Performance Computing Cloud Adapter User Guide. Consideration for DataSynapse HPCCA engines for calculating computational need Starting from this release, engines that are not created by DataSynapse HPCCA canbe included when calculating computational needs. To enable this feature, set the `CONSIDER_NON_HPCCA_ENGINES` property in the `cloudprovider.properties` file to true. Formore information, see TIBCO DataSynapse™High-Performance Computing CloudAdapter User Guide.

Version 1.3.0

Support for scale sets Scale sets that allow you to create and manage a group of identical, load balancedVMs on Azure are now supported for Windows and Linux 64-bit platforms.

Version 1.2.0

Support for custom images Custom images for both Windows and Linux 64-bit platforms are now supported onAWS and Azure. Support for auto scaling group Autoscaling groups for Windows and Linux 64-bit platforms are now supported onAWS. Grid Library Deployer A new feature to assist in deployment is a TIBCO-supported tool for deploying gridlibraries from the command line. The included `GridLibraryDeployer.zip` is a simple Java-based grid library deployment utility based on the `GridLibDeployer.java` class included inthe TIBCO DataSynapse GridServer® SDK. Enter `java -jar GridLibraryDeployer.jar` at thecommand line. A list of options is displayed. Support for SSL-Enabled DataSynapse GridServer® Manager DataSynapse HPCCA can now be installed on SSL-enabled managers. Earlierversions did not support SSL-enabled managers.

Version 1.1.0

Windows engines and initial reconfiguration changes The initial release of the DataSynapse HPCCA only included Linux-based engines. Itnow supports Windows engines. Also, the DataSynapse HPCCA now reconfigures an existing DataSynapseGridServer® Engine installation to enable it to connect to the current gridenvironment. This is done rather than the previous method of a fresh install, to enableyou to configure the virtual machine to properly connect into your infrastructure and toenable for the preinstallation of things like grid libraries and caching solutions.

Version 1.0.0

TIBCO DataSynapse™ High-Performance Computing Cloud Adapter DataSynapse HPCCA extends the functionality of DataSynapse GridServer® by enabling it to dynamically create virtual machines and provision them with the EngineDaemon. It was created to allow customers to temporarily increase their compute capacity during periods of unusually high load on their DataSynapse GridServer® deployment. The initial release, version 1.0.0, includes Linux 64-bit engines and a very simple cloud management algorithm.

Changes in Functionality

No changes have been made in Functionality as of this release of TIBCO DataSynapse™ High-Performance Computing Cloud Adapter.

Deprecated Features

No features have been deprecated as of this release of TIBCO DataSynapse™ High-Performance Computing Cloud Adapter.

Removed Features

No features have been removed as of this release of TIBCO DataSynapse™ High-Performance Computing Cloud Adapter.

Migration and Compatibility

The following information provides migration procedures and a compatibility matrix for this release of TIBCO DataSynapse™ High-Performance Computing Cloud Adapter.

Migrating to Version 2.1.0

Migration to version 2.1.0 from previous versions of DataSynapse™ High-Performance Computing Cloud Adapter (HPCCA) is not supported. For critical functionality or VM Images/AMIs that need to be used, contact TIBCO Support.

Closed Issues

The table lists closed issues since version 1.0.0 of TIBCO DataSynapse™ High-Performance Computing Cloud Adapter.

Version 2.1.0

No issues have been closed in this release of DataSynapse HPCCA.

Version 2.0.0

No issues have been closed in this release of DataSynapse HPCCA.

Version 1.5.0

No issues have been closed in this release of DataSynapse HPCCA.

Version 1.4.0

No issues have been closed in this release of DataSynapse HPCCA.

Version 1.3.0

KEY	SUMMARY
GS-15344	When the GridLibrary Deployer was used without a driver.properties file, it threw aMalformed URL exception. The GridLibrary Deployer has been removed fromthis release.
GS-13281	A Null Pointer Exception appeared while editing the hook properties within theGridServer Administration tool. The adapter has been modified to fix this issue.

Version 1.2.0

Engine Key Summary

KEY	SUMMARY
GS-13246	The adapter previously updated the /etc/hosts file on Linux Engine VMs. There is no need to do this. By introducing the customizable images and startup scripting (or ARM Templates) the Engine VM is no longer modified by the adapter automatically. If you want to continue to perform this activity, you must include it in User Data or VM Extension scripting.

Version 1.1.0

Key Summary

KEY	SUMMARY
GS-13278	The Director Communication Port was not being set properly on standalone Brokers. A DIRECTORPORT property was created in the cloudprovider.properties file which explicitly sets this value rather than relying on the install.properties.

Known Issues

The following issue exists in this release of TIBCO DataSynapse™ High-Performance Computing Cloud Adapter. Key Summary and Workaround Summary

Key	Description
HPCCA-444	Summary: An unexpected error occurs on DataSynapse GridServer® UI while enabling and disabling the hook from the UI. Workaround: None.

TIBCO Documentation and Support Services

For information about this product, you can read the documentation, contact TIBCO Support, and join TIBCO Community.

How to Access TIBCO Documentation

Documentation for TIBCO products is available on the Product Documentation website, mainly in HTML and PDF formats. The Product Documentation website is updated frequently and is more current than any other documentation included with the product.

Product-Specific Documentation

The following documentation for this product is available on the TIBCO DataSynapse™ High-Performance Computing Cloud Adapter Product Documentation page:

How to Contact Support for TIBCO Products

You can contact the Support team in the following ways:

- To access the Support Knowledge Base and getting personalized content about products you are interested in, visit our product Support website.
- To create a Support case, you must have a valid maintenance or support contract with a Cloud Software Group entity. You also need a username and password to log in to the product Support website. If you do not have a username, you can request one by clicking Register on the website.

How to Join TIBCO Community

TIBCO Community is the official channel for TIBCO customers, partners, and employees subject matter experts to share and access their collective experience. TIBCO Community offers access to Q&A forums, product wikis, and best practices. It also offers access to extensions, adapters, solution accelerators, and tools that extend and enable customers to gain full value from TIBCO products. In addition, users can submit and vote on feature requests from within the TIBCO Ideas Portal. For a free registration, go to TIBCO Community.

Legal and Third-Party Notices

SOME CLOUD SOFTWARE GROUP, INC. ("CLOUD SG") SOFTWARE AND CLOUD SERVICESEMBED, BUNDLE, OR OTHERWISE INCLUDE OTHER SOFTWARE, INCLUDING OTHERCLOUD SG SOFTWARE (COLLECTIVELY, "INCLUDED SOFTWARE"). USE OF INCLUDEDSOFTWARE IS SOLELY TO ENABLE THE FUNCTIONALITY (OR PROVIDE LIMITED ADD-ONFUNCTIONALITY) OF THE LICENSED CLOUD SG SOFTWARE AND/OR CLOUD SERVICES.THE INCLUDED SOFTWARE IS NOT LICENSED TO BE USED OR ACCESSED BY ANYOTHER CLOUD SG SOFTWARE AND/OR CLOUD SERVICES OR FOR ANY OTHERPURPOSE. USE OF CLOUD SG SOFTWARE AND CLOUD SERVICES IS SUBJECT TO THE TERMS ANDCONDITIONS OF AN AGREEMENT FOUND IN EITHER A SEPARATELY EXECUTEDAGREEMENT, OR, IF THERE IS NO SUCH SEPARATE AGREEMENT, THE CLICKWRAP ENDUSER AGREEMENT WHICH IS DISPLAYED WHEN ACCESSING, DOWNLOADING, ORINSTALLING THE SOFTWARE OR CLOUD SERVICES (AND WHICH IS DUPLICATED IN THELICENSE FILE) OR IF THERE IS NO SUCH LICENSE AGREEMENT OR CLICKWRAP ENDUSER AGREEMENT, THE LICENSE(S) LOCATED IN THE "LICENSE" FILE(S) OF THESOFTWARE. USE OF THIS DOCUMENT IS SUBJECT TO THOSE SAME TERMS ANDCONDITIONS, AND YOUR USE HEREOF SHALL CONSTITUTE ACCEPTANCE OF AND ANAGREEMENT TO BE BOUND BY THE SAME. This document is subject to U.S. and international copyright laws and treaties. No part of thisdocument may be reproduced in any form without the written authorization of Cloud SoftwareGroup, Inc. TIBCO, the TIBCO logo, the TIBCO O logo, DataSynapse, GridServer, DataSynapse Federator,FabricBroker, FabricServer, GridClient, LiveCluster, and SpeedLink are either registeredtrademarks or trademarks of Cloud Software Group, Inc. in the United States and/or othercountries. All other product and company names and marks mentioned in this document are the property oftheir respective owners and are mentioned for identification purposes only. You acknowledge thatall rights to these third party marks are the exclusive property of their respective owners. Pleaserefer to Cloud SG's Third Party Trademark Notices (<https://www.cloud.com/legal>) for moreinformation. This document includes fonts that are licensed under the SIL Open Font License, Version 1.1,which is available at: <https://scripts.sil.org/OFL> Copyright (c) Paul D. Hunt, with Reserved Font Name Source Sans Pro and Source Code Pro. Cloud SG software may be available on multiple operating systems. However, not all operatingsystem platforms for a specific software version are released at the same time. See the "readme"file for the availability of a specific version of Cloud SG software on a specific operating systemplatform. THIS DOCUMENT IS PROVIDED "AS IS" WITHOUT WARRANTY OF ANY KIND, EITHEREXPRESS OR IMPLIED, INCLUDING, BUT NOT LIMITED TO, THE IMPLIED WARRANTIES OFMERCHANTABILITY, FITNESS FOR A PARTICULAR PURPOSE, OR NON-INFRINGEMENT. THIS DOCUMENT COULD INCLUDE TECHNICAL INACCURACIES OR TYPOGRAPHICALERRORS. CHANGES ARE PERIODICALLY ADDED TO THE INFORMATION

HEREIN; THESE CHANGES WILL BE INCORPORATED IN NEW EDITIONS OF THIS DOCUMENT. CLOUD SG MAY MAKE IMPROVEMENTS AND/OR CHANGES IN THE PRODUCT(S), THE PROGRAM(S), AND/OR THE SERVICES DESCRIBED IN THIS DOCUMENT AT ANY TIME WITHOUT NOTICE. THE CONTENTS OF THIS DOCUMENT MAY BE MODIFIED AND/OR QUALIFIED, DIRECTLY OR INDIRECTLY, BY OTHER DOCUMENTATION WHICH ACCOMPANIES THIS SOFTWARE, INCLUDING BUT NOT LIMITED TO ANY RELEASE NOTES AND "README" FILES. This and other products of Cloud SG may be covered by registered patents. For details, please refer to the Virtual Patent Marking document located at <https://www.cloud.com/legal>. Copyright © 2001-2024. Cloud Software Group, Inc. All Rights Reserved.

New Features

The following features have been added since the last major release of TIBCO DataSynapse™ High-Performance Computing Cloud Adapter (HPCCA).

Version 2.1.0

Restarting HPCCA TIBCO DataSynapse™ High-Performance Computing Cloud Adapter can now restart, without restarting TIBCO DataSynapse GridServer® Manager for changes in cloudprovider.properties file. You must set the USE_HPPCA_AUTO_RESTART property present in cloudprovider.properties file to true. For more information, see TIBCO DataSynapse™ High-Performance Computing Cloud Adapter User Guide. VM batch termination for GCP By setting BATCH_VM_TERMINATION property to true in cloud provider, you can now terminate virtual machines in batch sizes. Park Engine feature for Aggressive Scale Down Using Park Engine feature, you can now mark engine daemon as a candidate to terminate, if busy engine count is less than or equal to MINIMUM_BUSY_ENGINE. This is based on value provided in MINIMUM_BUSY_ENGINE. For more information, see TIBCO DataSynapse™ High-Performance Computing Cloud Adapter User Guide.

Version 2.0.0

Support for multiple cloud providers DataSynapse HPCCA now supports engines for multiple cloud providers mentioned in the cloudprovider.properties file. For more information, see TIBCO DataSynapse™ High-Performance Computing Cloud Adapter User Guide. Aggressive scale down of engines If no task is running on the DataSynapse GridServer® Engine, DataSynapse HPCCA reduces the number of engines irrespective of the ENGINE_IDLE_TIMEOUT value. To enable this feature, set the AGGRESSIVE_SCALEDOWN property in the cloudprovider.properties file to true. For more information, see TIBCO DataSynapse™ High-Performance Computing Cloud Adapter User Guide. Monitoring engines on specific brokers DataSynapse HPCCA now monitors engines on particular brokers. A list of brokers is provided in the BROKER_HOSTNAME property in the cloudprovider.properties file. For more information, see TIBCO DataSynapse™ High-Performance Computing Cloud Adapter User Guide.

Version 1.5.0

No new features have been added in this release.

Version 1.4.0

Support for Google Cloud Platform Starting from this release, DataSynapse™High-Performance Computing CloudAdapter (HPCCA) can be configured for Google Cloud Platform (GCP) by using the `cloudprovider.properties` file. For more information, see TIBCO DataSynapse™High-Performance Computing Cloud Adapter User Guide. Consideration for DataSynapse HPCCA engines for calculating computational need Starting from this release, engines that are not created by DataSynapse HPCCA canbe included when calculating computational needs. To enable this feature, set the `CONSIDER_NON_HPCCA_ENGINES` property in the `cloudprovider.properties` file to true. Formore information, see TIBCO DataSynapse™High-Performance Computing CloudAdapter User Guide.

Version 1.3.0

Support for scale sets Scale sets that allow you to create and manage a group of identical, load balancedVMs on Azure are now supported for Windows and Linux 64-bit platforms.

Version 1.2.0

Support for custom images Custom images for both Windows and Linux 64-bit platforms are now supported onAWS and Azure. Support for auto scaling group Autoscaling groups for Windows and Linux 64-bit platforms are now supported onAWS. Grid Library Deployer A new feature to assist in deployment is a TIBCO-supported tool for deploying gridlibraries from the command line. The included `GridLibraryDeployer.zip` is a simple Java-based grid library deployment utility based on the `GridLibDeployer.java` class included inthe TIBCO DataSynapse GridServer® SDK. Enter `java -jar GridLibraryDeployer.jar` at thecommand line. A list of options is displayed. Support for SSL-Enabled DataSynapse GridServer® Manager DataSynapse HPCCA can now be installed on SSL-enabled managers. Earlierversions did not support SSL-enabled managers.

Version 1.1.0

Windows engines and initial reconfiguration changes The initial release of the DataSynapse HPCCA only included Linux-based engines. Itnow supports Windows engines. Also, the DataSynapse HPCCA now reconfigures an existing DataSynapseGridServer® Engine installation to enable it to connect to the current gridenvironment. This is done rather than the previous method of a fresh install, to enableyou to configure the virtual machine to properly connect into your infrastructure and toenable for the preinstallation of things like grid libraries and caching solutions.

Version 1.0.0

TIBCO DataSynapse™ High-Performance Computing Cloud Adapter DataSynapse HPCCA extends the functionality of DataSynapse GridServer® by enabling it to dynamically create virtual machines and provision them with the EngineDaemon. It was created to allow customers to temporarily increase their compute capacity during periods of unusually high load on their DataSynapse GridServer® deployment. The initial release, version 1.0.0, includes Linux 64-bit engines and a very simple cloud management algorithm.

Changes in Functionality

No changes have been made in Functionality as of this release of TIBCO DataSynapse™ High-Performance Computing Cloud Adapter.

Deprecated Features

No features have been deprecated as of this release of TIBCO DataSynapse™ High-Performance Computing Cloud Adapter.

Removed Features

No features have been removed as of this release of TIBCO DataSynapse™ High-Performance Computing Cloud Adapter.

Migration and Compatibility

The following information provides migration procedures and a compatibility matrix for this release of TIBCO DataSynapse™ High-Performance Computing Cloud Adapter.

Migrating to Version 2.1.0

Migration to version 2.1.0 from previous versions of DataSynapse™ High-Performance Computing Cloud Adapter (HPCCA) is not supported. For critical functionality or VM Images/AMIs that need to be used, contact TIBCO Support.

Closed Issues

The table lists closed issues since version 1.0.0 of TIBCO DataSynapse™ High-Performance Computing Cloud Adapter.

Version 2.1.0

No issues have been closed in this release of DataSynapse HPCCA.

Version 2.0.0

No issues have been closed in this release of DataSynapse HPCCA.

Version 1.5.0

No issues have been closed in this release of DataSynapse HPCCA.

Version 1.4.0

No issues have been closed in this release of DataSynapse HPCCA.

Version 1.3.0

KEY	SUMMARY
GS-15344	When the GridLibrary Deployer was used without a driver.properties file, it threw aMalformed URL exception. The GridLibrary Deployer has been removed fromthis release.
GS-13281	A Null Pointer Exception appeared while editing the hook properties within theGridServer Administration tool. The adapter has been modified to fix this issue.

Version 1.2.0

Engine Key Summary

KEY	SUMMARY
GS-13246	The adapter previously updated the /etc/hosts file on Linux Engine VMs. There is no need to do this. By introducing the customizable images and startup scripting (or ARM Templates) the Engine VM is no longer modified by the adapter automatically. If you want to continue to perform this activity, you must include it in User Data or VM Extension scripting.

Version 1.1.0

Key Summary

KEY	SUMMARY
GS-13278	The Director Communication Port was not being set properly on standalone Brokers. A DIRECTORPORT property was created in the cloudprovider.properties file which explicitly sets this value rather than relying on the install.properties.

Known Issues

The following issue exists in this release of TIBCO DataSynapse™ High-Performance Computing Cloud Adapter. Key Summary and Workaround Summary

Key	Description
HPCCA-444	Summary: An unexpected error occurs on DataSynapse GridServer® UI while enabling and disabling the hook from the UI. Workaround: None.

TIBCO Documentation and Support Services

For information about this product, you can read the documentation, contact TIBCO Support, and join TIBCO Community.

How to Access TIBCO Documentation

Documentation for TIBCO products is available on the Product Documentation website, mainly in HTML and PDF formats. The Product Documentation website is updated frequently and is more current than any other documentation included with the product.

Product-Specific Documentation

The following documentation for this product is available on the TIBCO DataSynapse™ High-Performance Computing Cloud Adapter Product Documentation page:

How to Contact Support for TIBCO Products

You can contact the Support team in the following ways:

- To access the Support Knowledge Base and getting personalized content about products you are interested in, visit our product Support website.
- To create a Support case, you must have a valid maintenance or support contract with a Cloud Software Group entity. You also need a username and password to log in to the product Support website. If you do not have a username, you can request one by clicking Register on the website.

How to Join TIBCO Community

TIBCO Community is the official channel for TIBCO customers, partners, and employees subject matter experts to share and access their collective experience. TIBCO Community offers access to Q&A forums, product wikis, and best practices. It also offers access to extensions, adapters, solution accelerators, and tools that extend and enable customers to gain full value from TIBCO products. In addition, users can submit and vote on feature requests from within the TIBCO Ideas Portal. For a free registration, go to TIBCO Community.

Legal and Third-Party Notices

SOME CLOUD SOFTWARE GROUP, INC. ("CLOUD SG") SOFTWARE AND CLOUD SERVICESEMBED, BUNDLE, OR OTHERWISE INCLUDE OTHER SOFTWARE, INCLUDING OTHERCLOUD SG SOFTWARE (COLLECTIVELY, "INCLUDED SOFTWARE"). USE OF INCLUDEDSOFTWARE IS SOLELY TO ENABLE THE FUNCTIONALITY (OR PROVIDE LIMITED ADD-ONFUNCTIONALITY) OF THE LICENSED CLOUD SG SOFTWARE AND/OR CLOUD SERVICES.THE INCLUDED SOFTWARE IS NOT LICENSED TO BE USED OR ACCESSED BY ANYOTHER CLOUD SG SOFTWARE AND/OR CLOUD SERVICES OR FOR ANY OTHERPURPOSE. USE OF CLOUD SG SOFTWARE AND CLOUD SERVICES IS SUBJECT TO THE TERMS ANDCONDITIONS OF AN AGREEMENT FOUND IN EITHER A SEPARATELY EXECUTEDAGREEMENT, OR, IF THERE IS NO SUCH SEPARATE AGREEMENT, THE CLICKWRAP ENDUSER AGREEMENT WHICH IS DISPLAYED WHEN ACCESSING, DOWNLOADING, ORINSTALLING THE SOFTWARE OR CLOUD SERVICES (AND WHICH IS DUPLICATED IN THELICENSE FILE) OR IF THERE IS NO SUCH LICENSE AGREEMENT OR CLICKWRAP ENDUSER AGREEMENT, THE LICENSE(S) LOCATED IN THE "LICENSE" FILE(S) OF THESOFTWARE. USE OF THIS DOCUMENT IS SUBJECT TO THOSE SAME TERMS ANDCONDITIONS, AND YOUR USE HEREOF SHALL CONSTITUTE ACCEPTANCE OF AND ANAGREEMENT TO BE BOUND BY THE SAME. This document is subject to U.S. and international copyright laws and treaties. No part of thisdocument may be reproduced in any form without the written authorization of Cloud SoftwareGroup, Inc. TIBCO, the TIBCO logo, the TIBCO O logo, DataSynapse, GridServer, DataSynapse Federator,FabricBroker, FabricServer, GridClient, LiveCluster, and SpeedLink are either registeredtrademarks or trademarks of Cloud Software Group, Inc. in the United States and/or othercountries. All other product and company names and marks mentioned in this document are the property oftheir respective owners and are mentioned for identification purposes only. You acknowledge thatall rights to these third party marks are the exclusive property of their respective owners. Pleaserefer to Cloud SG's Third Party Trademark Notices (<https://www.cloud.com/legal>) for moreinformation. This document includes fonts that are licensed under the SIL Open Font License, Version 1.1,which is available at: <https://scripts.sil.org/OFL> Copyright (c) Paul D. Hunt, with Reserved Font Name Source Sans Pro and Source Code Pro. Cloud SG software may be available on multiple operating systems. However, not all operatingsystem platforms for a specific software version are released at the same time. See the "readme"file for the availability of a specific version of Cloud SG software on a specific operating systemplatform. THIS DOCUMENT IS PROVIDED "AS IS" WITHOUT WARRANTY OF ANY KIND, EITHEREXPRESS OR IMPLIED, INCLUDING, BUT NOT LIMITED TO, THE IMPLIED WARRANTIES OFMERCHANTABILITY, FITNESS FOR A PARTICULAR PURPOSE, OR NON-INFRINGEMENT. THIS DOCUMENT COULD INCLUDE TECHNICAL INACCURACIES OR TYPOGRAPHICALERRORS. CHANGES ARE PERIODICALLY ADDED TO THE INFORMATION

HEREIN; THESE CHANGES WILL BE INCORPORATED IN NEW EDITIONS OF THIS DOCUMENT. CLOUD SG MAY MAKE IMPROVEMENTS AND/OR CHANGES IN THE PRODUCT(S), THE PROGRAM(S), AND/OR THE SERVICES DESCRIBED IN THIS DOCUMENT AT ANY TIME WITHOUT NOTICE. THE CONTENTS OF THIS DOCUMENT MAY BE MODIFIED AND/OR QUALIFIED, DIRECTLY OR INDIRECTLY, BY OTHER DOCUMENTATION WHICH ACCOMPANIES THIS SOFTWARE, INCLUDING BUT NOT LIMITED TO ANY RELEASE NOTES AND "README" FILES. This and other products of Cloud SG may be covered by registered patents. For details, please refer to the Virtual Patent Marking document located at <https://www.cloud.com/legal>. Copyright © 2001-2024. Cloud Software Group, Inc. All Rights Reserved.

New Features

The following features have been added since the last major release of TIBCO DataSynapse™ High-Performance Computing Cloud Adapter (HPCCA).

Version 2.1.0

Restarting HPCCA TIBCO DataSynapse™ High-Performance Computing Cloud Adapter can now restart, without restarting TIBCO DataSynapse GridServer® Manager for changes in cloudprovider.properties file. You must set the USE_HPPCA_AUTO_RESTART property present in cloudprovider.properties file to true. For more information, see TIBCO DataSynapse™ High-Performance Computing Cloud Adapter User Guide. VM batch termination for GCP By setting BATCH_VM_TERMINATION property to true in cloud provider, you can now terminate virtual machines in batch sizes. Park Engine feature for Aggressive Scale Down Using Park Engine feature, you can now mark engine daemon as a candidate to terminate, if busy engine count is less than or equal to MINIMUM_BUSY_ENGINE. This is based on value provided in MINIMUM_BUSY_ENGINE. For more information, see TIBCO DataSynapse™ High-Performance Computing Cloud Adapter User Guide.

Version 2.0.0

Support for multiple cloud providers DataSynapse HPCCA now supports engines for multiple cloud providers mentioned in the cloudprovider.properties file. For more information, see TIBCO DataSynapse™ High-Performance Computing Cloud Adapter User Guide. Aggressive scale down of engines If no task is running on the DataSynapse GridServer® Engine, DataSynapse HPCCA reduces the number of engines irrespective of the ENGINE_IDLE_TIMEOUT value. To enable this feature, set the AGGRESSIVE_SCALEDOWN property in the cloudprovider.properties file to true. For more information, see TIBCO DataSynapse™ High-Performance Computing Cloud Adapter User Guide. Monitoring engines on specific brokers DataSynapse HPCCA now monitors engines on particular brokers. A list of brokers is provided in the BROKER_HOSTNAME property in the cloudprovider.properties file. For more information, see TIBCO DataSynapse™ High-Performance Computing Cloud Adapter User Guide.

Version 1.5.0

No new features have been added in this release.

Version 1.4.0

Support for Google Cloud Platform Starting from this release, DataSynapse™High-Performance Computing CloudAdapter (HPCCA) can be configured for Google Cloud Platform (GCP) by using the `cloudprovider.properties` file. For more information, see TIBCO DataSynapse™High-Performance Computing Cloud Adapter User Guide. Consideration for DataSynapse HPCCA engines for calculating computational need Starting from this release, engines that are not created by DataSynapse HPCCA canbe included when calculating computational needs. To enable this feature, set the `CONSIDER_NON_HPCCA_ENGINES` property in the `cloudprovider.properties` file to true. Formore information, see TIBCO DataSynapse™High-Performance Computing CloudAdapter User Guide.

Version 1.3.0

Support for scale sets Scale sets that allow you to create and manage a group of identical, load balancedVMs on Azure are now supported for Windows and Linux 64-bit platforms.

Version 1.2.0

Support for custom images Custom images for both Windows and Linux 64-bit platforms are now supported onAWS and Azure. Support for auto scaling group Autoscaling groups for Windows and Linux 64-bit platforms are now supported onAWS. Grid Library Deployer A new feature to assist in deployment is a TIBCO-supported tool for deploying gridlibraries from the command line. The included `GridLibraryDeployer.zip` is a simple Java-based grid library deployment utility based on the `GridLibDeployer.java` class included inthe TIBCO DataSynapse GridServer® SDK. Enter `java -jar GridLibraryDeployer.jar` at thecommand line. A list of options is displayed. Support for SSL-Enabled DataSynapse GridServer® Manager DataSynapse HPCCA can now be installed on SSL-enabled managers. Earlierversions did not support SSL-enabled managers.

Version 1.1.0

Windows engines and initial reconfiguration changes The initial release of the DataSynapse HPCCA only included Linux-based engines. Itnow supports Windows engines. Also, the DataSynapse HPCCA now reconfigures an existing DataSynapseGridServer® Engine installation to enable it to connect to the current gridenvironment. This is done rather than the previous method of a fresh install, to enableyou to configure the virtual machine to properly connect into your infrastructure and toenable for the preinstallation of things like grid libraries and caching solutions.

Version 1.0.0

TIBCO DataSynapse™ High-Performance Computing Cloud Adapter DataSynapse HPCCA extends the functionality of DataSynapse GridServer® by enabling it to dynamically create virtual machines and provision them with the EngineDaemon. It was created to allow customers to temporarily increase their compute capacity during periods of unusually high load on their DataSynapse GridServer® deployment. The initial release, version 1.0.0, includes Linux 64-bit engines and a very simple cloud management algorithm.

Changes in Functionality

No changes have been made in Functionality as of this release of TIBCO DataSynapse™ High-Performance Computing Cloud Adapter.

Deprecated Features

No features have been deprecated as of this release of TIBCO DataSynapse™ High-Performance Computing Cloud Adapter.

Removed Features

No features have been removed as of this release of TIBCO DataSynapse™ High-Performance Computing Cloud Adapter.

Migration and Compatibility

The following information provides migration procedures and a compatibility matrix for this release of TIBCO DataSynapse™ High-Performance Computing Cloud Adapter.

Migrating to Version 2.1.0

Migration to version 2.1.0 from previous versions of DataSynapse™ High-Performance Computing Cloud Adapter (HPCCA) is not supported. For critical functionality or VM Images/AMIs that need to be used, contact TIBCO Support.

Closed Issues

The table lists closed issues since version 1.0.0 of TIBCO DataSynapse™ High-Performance Computing Cloud Adapter.

Version 2.1.0

No issues have been closed in this release of DataSynapse HPCCA.

Version 2.0.0

No issues have been closed in this release of DataSynapse HPCCA.

Version 1.5.0

No issues have been closed in this release of DataSynapse HPCCA.

Version 1.4.0

No issues have been closed in this release of DataSynapse HPCCA.

Version 1.3.0

KEY	SUMMARY
GS-15344	When the GridLibrary Deployer was used without a driver.properties file, it threw aMalformed URL exception. The GridLibrary Deployer has been removed fromthis release.
GS-13281	A Null Pointer Exception appeared while editing the hook properties within theGridServer Administration tool. The adapter has been modified to fix this issue.

Version 1.2.0

Engine Key Summary

KEY	SUMMARY
GS-13246	The adapter previously updated the /etc/hosts file on Linux Engine VMs. There is no need to do this. By introducing the customizable images and startup scripting (or ARM Templates) the Engine VM is no longer modified by the adapter automatically. If you want to continue to perform this activity, you must include it in User Data or VM Extension scripting.

Version 1.1.0

Key Summary

KEY	SUMMARY
GS-13278	The Director Communication Port was not being set properly on standalone Brokers. A DIRECTORPORT property was created in the cloudprovider.properties file which explicitly sets this value rather than relying on the install.properties.

Known Issues

The following issue exists in this release of TIBCO DataSynapse™ High-Performance Computing Cloud Adapter. Key Summary and Workaround Summary

Key	Description
HPCCA-444	Summary: An unexpected error occurs on DataSynapse GridServer® UI while enabling and disabling the hook from the UI. Workaround: None.

TIBCO Documentation and Support Services

For information about this product, you can read the documentation, contact TIBCO Support, and join TIBCO Community.

How to Access TIBCO Documentation

Documentation for TIBCO products is available on the Product Documentation website, mainly in HTML and PDF formats. The Product Documentation website is updated frequently and is more current than any other documentation included with the product.

Product-Specific Documentation

The following documentation for this product is available on the TIBCO DataSynapse™ High-Performance Computing Cloud Adapter Product Documentation page:

How to Contact Support for TIBCO Products

You can contact the Support team in the following ways:

- To access the Support Knowledge Base and getting personalized content about products you are interested in, visit our product Support website.
- To create a Support case, you must have a valid maintenance or support contract with a Cloud Software Group entity. You also need a username and password to log in to the product Support website. If you do not have a username, you can request one by clicking Register on the website.

How to Join TIBCO Community

TIBCO Community is the official channel for TIBCO customers, partners, and employees subject matter experts to share and access their collective experience. TIBCO Community offers access to Q&A forums, product wikis, and best practices. It also offers access to extensions, adapters, solution accelerators, and tools that extend and enable customers to gain full value from TIBCO products. In addition, users can submit and vote on feature requests from within the TIBCO Ideas Portal. For a free registration, go to TIBCO Community.

Legal and Third-Party Notices

SOME CLOUD SOFTWARE GROUP, INC. ("CLOUD SG") SOFTWARE AND CLOUD SERVICESEMBED, BUNDLE, OR OTHERWISE INCLUDE OTHER SOFTWARE, INCLUDING OTHERCLOUD SG SOFTWARE (COLLECTIVELY, "INCLUDED SOFTWARE"). USE OF INCLUDEDSOFTWARE IS SOLELY TO ENABLE THE FUNCTIONALITY (OR PROVIDE LIMITED ADD-ONFUNCTIONALITY) OF THE LICENSED CLOUD SG SOFTWARE AND/OR CLOUD SERVICES.THE INCLUDED SOFTWARE IS NOT LICENSED TO BE USED OR ACCESSED BY ANYOTHER CLOUD SG SOFTWARE AND/OR CLOUD SERVICES OR FOR ANY OTHERPURPOSE. USE OF CLOUD SG SOFTWARE AND CLOUD SERVICES IS SUBJECT TO THE TERMS ANDCONDITIONS OF AN AGREEMENT FOUND IN EITHER A SEPARATELY EXECUTEDAGREEMENT, OR, IF THERE IS NO SUCH SEPARATE AGREEMENT, THE CLICKWRAP ENDUSER AGREEMENT WHICH IS DISPLAYED WHEN ACCESSING, DOWNLOADING, ORINSTALLING THE SOFTWARE OR CLOUD SERVICES (AND WHICH IS DUPLICATED IN THELICENSE FILE) OR IF THERE IS NO SUCH LICENSE AGREEMENT OR CLICKWRAP ENDUSER AGREEMENT, THE LICENSE(S) LOCATED IN THE "LICENSE" FILE(S) OF THESOFTWARE. USE OF THIS DOCUMENT IS SUBJECT TO THOSE SAME TERMS ANDCONDITIONS, AND YOUR USE HEREOF SHALL CONSTITUTE ACCEPTANCE OF AND ANAGREEMENT TO BE BOUND BY THE SAME. This document is subject to U.S. and international copyright laws and treaties. No part of thisdocument may be reproduced in any form without the written authorization of Cloud SoftwareGroup, Inc. TIBCO, the TIBCO logo, the TIBCO O logo, DataSynapse, GridServer, DataSynapse Federator,FabricBroker, FabricServer, GridClient, LiveCluster, and SpeedLink are either registeredtrademarks or trademarks of Cloud Software Group, Inc. in the United States and/or othercountries. All other product and company names and marks mentioned in this document are the property oftheir respective owners and are mentioned for identification purposes only. You acknowledge thatall rights to these third party marks are the exclusive property of their respective owners. Pleaserefer to Cloud SG's Third Party Trademark Notices (<https://www.cloud.com/legal>) for moreinformation. This document includes fonts that are licensed under the SIL Open Font License, Version 1.1,which is available at: <https://scripts.sil.org/OFL> Copyright (c) Paul D. Hunt, with Reserved Font Name Source Sans Pro and Source Code Pro. Cloud SG software may be available on multiple operating systems. However, not all operatingsystem platforms for a specific software version are released at the same time. See the "readme"file for the availability of a specific version of Cloud SG software on a specific operating systemplatform. THIS DOCUMENT IS PROVIDED "AS IS" WITHOUT WARRANTY OF ANY KIND, EITHEREXPRESS OR IMPLIED, INCLUDING, BUT NOT LIMITED TO, THE IMPLIED WARRANTIES OFMERCHANTABILITY, FITNESS FOR A PARTICULAR PURPOSE, OR NON-INFRINGEMENT. THIS DOCUMENT COULD INCLUDE TECHNICAL INACCURACIES OR TYPOGRAPHICALERRORS. CHANGES ARE PERIODICALLY ADDED TO THE INFORMATION

HEREIN; THESE CHANGES WILL BE INCORPORATED IN NEW EDITIONS OF THIS DOCUMENT. CLOUD SG MAY MAKE IMPROVEMENTS AND/OR CHANGES IN THE PRODUCT(S), THE PROGRAM(S), AND/OR THE SERVICES DESCRIBED IN THIS DOCUMENT AT ANY TIME WITHOUT NOTICE. THE CONTENTS OF THIS DOCUMENT MAY BE MODIFIED AND/OR QUALIFIED, DIRECTLY OR INDIRECTLY, BY OTHER DOCUMENTATION WHICH ACCOMPANIES THIS SOFTWARE, INCLUDING BUT NOT LIMITED TO ANY RELEASE NOTES AND "README" FILES. This and other products of Cloud SG may be covered by registered patents. For details, please refer to the Virtual Patent Marking document located at <https://www.cloud.com/legal>. Copyright © 2001-2024. Cloud Software Group, Inc. All Rights Reserved.