

# TIBCO Silver<sup>®</sup> Fabric

## Release Notes

*Software Release 5.6*  
*May 2014*

**Two-Second Advantage<sup>®</sup>**



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# Preface

TIBCO Silver<sup>®</sup> Fabric combines the flexibility and scalability of the public cloud with the security and control of your own data center. It brings the elasticity of cloud computing to your organization – supporting existing solutions within your current infrastructure while automatically scaling resources to meet demand.

## Topics

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- [Related Documentation, page viii](#)
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## Related Documentation

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This section lists documentation resources you may find useful.

For the latest version of documentation, including any changes or additions made since the last product release, please visit <http://docs.tibco.com>.

### TIBCO Silver Fabric Documentation

The following documentation is included with Silver Fabric in Adobe Acrobat (PDF) format. To view the guides, log in to the Administration Tool and go to **Admin > Documentation**. The PDF files are also on the Broker at `SF_HOME/webapps/livecluster/admin/docs`. The following documents form the Silver Fabric documentation set:

- *Introducing Silver Fabric* Contains an introduction to Silver Fabric, including definitions of key concepts and terms, such as Enablers, Stacks, Components, Engines, and Brokers. Read this first if you are new to Silver Fabric.
- *Silver Fabric Installation Guide* Covers installation of Silver Fabric for Windows and Unix, including Brokers, Engines, and pre-installation planning.
- *Silver Fabric Cloud Administration Guide* Covers Silver Fabric cloud administration, configuration of Engines, Enablers, and Components, and configuration and use of Skyway. Also covers security, general maintenance, performance tuning, and database administration.
- *Silver Fabric Developer's Guide* Developer-related topics such as logging and debugging, using the Admin API, and the Enabler SDK.
- *Silver Fabric Developer's Tutorial* Tutorials for developers, such as how to write Enablers and Asset Managers.
- *Silver Fabric User's Guide* Covers Silver Fabric use and operation, including management of Engines, Enablers, Components, and Stacks.
- *Silver Fabric Skyway User's Guide* Covers usage of Skyway, which enables users to quickly and easily provision and manage their Silver Fabric Stacks.
- *Silver Fabric Tomcat Enabler Guide* Covers installation and configuration of applications run on the Tomcat Enabler.
- *Silver Fabric Command Line Enabler Guide* Covers installation and configuration of applications run on the Command Line Enabler.



## Other Documentation and Help

Additional help and information is available from the following sources:

- *Silver Fabric Administration Tool Help* Context-sensitive help is provided throughout the Silver Fabric Administration Tool by clicking the Page Help button located on any page.
- *API Reference* Silver Fabric API reference information is available in the Silver Fabric SDK in the `api` directory in JavaDoc format. You can also view and search them from the Silver Fabric Administration Tool; log in to the Administration Tool and go to **Admin > Documentation**.

## Typographical Conventions

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The following typographical conventions are used in this manual.

Table 1 General Typographical Conventions

Convention	Use
<i>TIBCO_HOME</i>	Many TIBCO products must be installed within the same home directory. This directory is referenced in documentation as <i>TIBCO_HOME</i> . The default value of <i>TIBCO_HOME</i> depends on the operating system. For example, on Windows systems, the default value is C:\tibco.
<i>SF_HOME</i>	TIBCO Silver <sup>®</sup> Fabric installs into a directory within <i>TIBCO_HOME</i> . This directory is referenced in documentation as <i>SF_HOME</i> . The default value of <i>SF_HOME</i> depends on the operating system. For example on Windows systems, the default value is C:\tibco\fabric.
code font	Code font identifies commands, code examples, filenames, pathnames, and output displayed in a command window. For example:  Use MyCommand to start the foo process.
bold code font	Bold code font is used in the following ways: <ul style="list-style-type: none"> <li>• In procedures, to indicate what a user types. For example: Type <b>admin</b>.</li> <li>• In large code samples, to indicate the parts of the sample that are of particular interest.</li> <li>• In command syntax, to indicate the default parameter for a command. For example, if no parameter is specified, MyCommand is enabled: MyCommand [<b>enable</b>   disable]</li> </ul>
italic font	Italic font is used in the following ways: <ul style="list-style-type: none"> <li>• To indicate a document title. For example: See <i>TIBCO ActiveMatrix BusinessWorks Concepts</i>.</li> <li>• To introduce new terms. For example: A portal page may contain several portlets. <i>Portlets</i> are mini-applications that run in a portal.</li> <li>• To indicate a variable in a command or code syntax that you must replace. For example: MyCommand <i>PathName</i></li> </ul>

Table 1 General Typographical Conventions (Continued)




Convention	Use
Key combinations	Key names separated by a plus sign indicates keys pressed simultaneously. For example: Ctrl+C.  Key names separated by a comma and space indicate keys pressed one after the other. For example: Esc, Ctrl+Q.
	The note icon indicates information that is of special interest or importance, for example, an additional action required only in certain circumstances.
	The tip icon indicates an idea that could be useful, for example, a way to apply the information provided in the current section to achieve a specific result.
	The warning icon indicates the potential for a damaging situation, for example, data loss or corruption if certain steps are taken or not taken.

Table 2 Syntax Typographical Conventions

Convention	Use
[ ]	An optional item in a command or code syntax.  For example: <code>MyCommand [optional_parameter] required_parameter</code>
	A logical OR that separates multiple items of which only one may be chosen.  For example, you can select only one of the following parameters: <code>MyCommand param1   param2   param3</code>

Table 2 *Syntax Typographical Conventions (Continued)*

Convention	Use
{ }	<p>A logical group of items in a command. Other syntax notations may appear within each logical group.</p> <p>For example, the following command requires two parameters, which can be either the pair <code>param1</code> and <code>param2</code>, or the pair <code>param3</code> and <code>param4</code>.</p> <pre>MyCommand {param1 param2}   {param3 param4}</pre> <p>In the next example, the command requires two parameters. The first parameter can be either <code>param1</code> or <code>param2</code> and the second can be either <code>param3</code> or <code>param4</code>:</p> <pre>MyCommand {param1   param2} {param3   param4}</pre> <p>In the next example, the command can accept either two or three parameters. The first parameter must be <code>param1</code>. You can optionally include <code>param2</code> as the second parameter. And the last parameter is either <code>param3</code> or <code>param4</code>.</p> <pre>MyCommand param1 [param2] {param3   param4}</pre>

## Connecting with TIBCO Resources

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### How to Join TIBCOmmunity

TIBCOmmunity is an online destination for TIBCO customers, partners, and resident experts, a place to share and access the collective experience of the TIBCO community. TIBCOmmunity offers forums, blogs, and access to a variety of resources. To register, go to <http://www.tibcommunity.com>.

### How to Access All TIBCO Documentation

After you join TIBCOmmunity, you can access the documentation for all supported product versions here:

<http://docs.tibco.com>

### How to Contact TIBCO Support

For comments or problems with this manual or the software it addresses, please contact TIBCO Support as follows.

- For an overview of TIBCO Support, and information about getting started with TIBCO Support, visit this site:

<http://www.tibco.com/services/support>

- If you already have a valid maintenance or support contract, visit this site:

<https://support.tibco.com>

Entry to this site requires a user name and password. If you do not have a user name, you can request one.



# Release Notes

Check the TIBCO Product Support web site at <https://support.tibco.com> for product information that was not available at release time. Entry to this site requires a username and password. If you do not have a username, you can request one. You must have a valid maintenance or support contract to use this site.

## Topics

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- [Changes in Functionality, page 13](#)
- [Deprecated and Removed Features, page 14](#)
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## New Features

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This section lists features added since the last major (4.1) release of this product.

### Release 5.6

- The SDK now includes a utility class `JMXBeanInspector` to allow users to explore and construct XPath for use in `MXBeanStatisticsMetadata` and `MXBeanStatisticsProvider`.
- The Broker SMTP client can now be configured with additional JavaMail properties.
- Multiple LDAP servers can now be used for LDAP Authentication.
- Locally-managed security roles in Silver Fabric can now be used instead of or along with LDAP group-to-role mappings. Users can also be mapped to Silver Fabric Accounts on a per-user basis or with LDAP groups.
- The Administration Tool is now Kerberos Single Sign-on capable. When used, a user no longer needs to log in to any Broker or Skyway; they are logged in automatically based on their workstation login. Note that a third-party product is required for this. Ant tasks and the CLI can also be configured for Kerberos authentication. REST services require a Kerberos capable client.
- Engine logs can now be proxied through the Broker when enabling the Broker Config > Engine and Clients > Miscellaneous > Proxy for Engine Logs setting.
- On the "Log URL List" and "Browse Work Directory" pages, when you click on a text file, the file will now be displayed in another browser window without being saved in the download folder.
- The License page has been removed.
- Sample Ant Task build scripts are now included in the Command Line Interface installation archive.
- Passwords or other sensitive information passed in from clients can now be encrypted using the new obfuscation REST service. The applies to CLI, Ant, REST, Asset Manger configuration and variable providers.
- When using the VMware Asset Manager with vSphere 5 or greater, you can prepare a VMware image and have the Engine installed by the Asset Manager on any image with VMware tools installed.
- The full version of the Java JDK is no longer required for installation. The JRE can be used instead.



- HTTP threads can now include the IP address and client information in the name. This is useful when generating thread dumps for troubleshooting network problems. To enable this, use the Broker Config > Logging setting 'Set the Message Thread Names'. This takes effect immediately. Note that you should only enable this when troubleshooting, as it can have a performance impact.
- The default admin database backup cron has been changed to '0 \*/15 \* \* \* ?'. Additional recommended production settings have been added to the descriptions for Config > Broker > General > Allocation > Initial Wait Interval and Failover Wait Interval settings.
- SMTP server username and password can now be configured in the Administration Tool.
- Broker installation and upgrade can now be performed from the command line with an unattended installer script.
- MySQL 5 and PostgreSQL 9 are now supported as Silver Fabric reporting databases.
- An external artifact repository is now supported to allow deployment of versioned archives from a central repository such as a Maven server. Also, support is added for reconstitution of archives to a previously running configuration when a running Component is restarted.
- Archive deployment now supports custom locators for retrieving archives from alternate locations. `AbstractContainer.resolveArchive` must be implemented or scripted in the Component or the Enabler.
- Brokers now include an embedded TIBCO Enterprise Administrator agent for management of Stacks from any TIBCO Enterprise Administrator server.
- You can now use an HTTP GET to `http://host:port/livecluster/public_html/ping/failover.jsp` to determine a Failover Broker's status. If it is acting as the Primary Broker, it will return HTTP response code 200; otherwise, it will return 500.
- The runtime context variable `COMPONENT_INSTANCE_NUMBERING_ENABLED` can now be specified to force Component instance numbers to zero when the Component instance number is enabled for the particular Component.
- Linux distributions that are materially equivalent to supported Red Hat Enterprise Linux versions are now supported.
- `featureinfo` classes which were available in the Velocity context, are now available in the resolved runtime context.
- The runtime context variable `DEFAULT_LOG_PATTERNS` can now be specified on the Component or the Enabler to provide the list of default log file patterns available in the Component wizard. The default delimiter is a comma but can

be changed with the runtime context variable `DEFAULT_LOG_PATTERNS_DELIMITER`.

- Variables from variable providers are now refreshed upon archive deployment and archive scaling actions on the Enabler.
- Engine properties are now available to an Enabler by using the methods within the `ContainerUtils` class.
- A Component Notification feature was added, which adds the ability for a Component to receive notifications from other Components, such as when they are activated, running, or deactivated.
- `AbstractStatisticsProvider` and `BasicStatisticsMetadata` can now be disabled for custom Enablers that wish to support multiple application versions from a single Enabler.
- `AbstractContainer.isActivating()` is now available for Enablers that need to know if archive methods are being run at startup versus continuous deployment.
- Engines can now log in new Broker pairs without restarting the Components currently running. The Broker receiving migrating Engines delays Allocation based on the "Failover Wait Interval" setting. This adds a new Engine Daemon Action "Migrate Engines" on the Daemon Admin page, and similar global actions.
- A "Maximum number of Log Files" option was added to Engine Configurations, to limit the maximum number of log files retained per Engine or Engine Daemon. Its default value is 0, meaning unlimited.
- Invoking `unzip` in an Enabler would sometimes fail, due to the Engine Daemon setting the environment variable `UNZIP`. This variable is now renamed `UNZIP_TOOL` to prevent this issue.
- AIX is no longer supported.
- Archives deployed directly to an endpoint can now be propagated to all instances of a JBoss cluster with a new continuous deployment property `START_ARCHIVE_CLUSTER=true`. This property is supported for all JBoss Enablers except EAP 6.0.0 and community 7.1.0.
- `VirtualRouter` now rewrites URL references in web pages (for example, `HREF`, `SRC`, `ACTION`, and `URL` elements) to properly map to the existing routing prefix for the Component or static route being used, and the `VirtualRouter` URL for absolute links to server addresses. This can be disabled, or customized with additional rewrite patterns.
- `VirtualRouter` now converts the Location header on redirects to be absolute, including the authority information (protocol/host/port) of the `VirtualRouter`.

- The REST service `/skyway/stack-names` is now available to retrieve the list of Stack names for the authenticated user.
- REST services are now available for managing Users, Roles and Accounts.
- REST services are now available for uploading and removing Asset Managers, Variable Providers and Custom Conditions.
- `AbstractContainer.resolveArchive` can now be scripted to support custom archive locators.
- The `CATALINA_OPTS` variable in Tomcat can now be set with a runtime context variable of the same name in the Tomcat Enabler, or can be overridden in a Component.
- The Apache Tomcat Enabler now supports Apache Tomcat 8.
- WebSphere Deployment Manager Enablers will now automatically set up global security on the Deployment Manager based on a set of new context variables: `APP_SECURITY_ENABLED`, `JAVA2_SECURITY_ENABLED`, `ACTIVE_AUTH_MECHANISM`, `ACTIVE_USER_REGISTRY`, `CUPRIMARY_ID`, `CUSERVER_ID`, `CUSERVER_PASSWORD`, `CUSERVER_CLASS`, `KEY_STORE_NAME`, and `TRUST_STORE_NAME`.

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- Enablers can now be removed from the Admin UI, Admin API, CLI and REST services.
- Exported variables are now available in `FabricEngineInfo` in the Admin API.
- `AccountNameUtils` is a new utility for extracting the account and plain name for a Component and a Stack.
- Global archive scaling rules are now viewable by account users.
- Non-cloud users can now restart Components and kill Engines that he/she has access to.
- The Install menu item in the Engine tab of the Admin UI was moved to the end since it is used less frequently than the other items.
- A Distributions page was added to the Admin UI to show the details of all distribution grid libraries installed on the Broker.
- The Component Test page has been removed. Links to the active endpoints are now available from the VirtualRouter status page.
- The Engine work directory browser now sorts entries in ascending order by 'Last Modified' date.

- A log message and low level alert is now generated when a statistic rule sampling window is too low and doesn't aggregate any statistics when evaluated.
- Allocation can now be disabled by the Broker configuration property 'Allocation Disabled'. No Engines will be activated or deactivated at this time.
- The Archive scaling editor has a new tab that contains the advanced options for scaling rules.
- Archive scaling events are now posted to Asset Managers, SNMP traps and email subscribers.
- Archive scaling timeouts are now configurable in Component Options.
- Scalable archives are no longer detected by their reported statistics. They are now found from the Component's `ActivationInfo.RunningArchives` property.
- The `EventPoster` interface was exposed to make extending `DefaultAssetProvisioningWorkflow` easier.
- File permissions are better maintained during the copying and extraction of grid library contents.
- The Broker now logs an error at start-up when it can't resolve its host name or is not running a 1.7 or later JDK.
- A caching service is now available for scaling archives across Enablers that don't support centralized deployment such as Tomcat and JBoss.
- A Silver Fabric license is now embedded in the Broker and no longer needs to be installed.
- The Broker now supports context sensitive variable providers via the `DynamicVariableProvider` interface.
- Java 6 is no longer supported for running the Broker or the Engine. Java 6 is still supported for running Enabler sub-processes.
- A low level alert is now generated when changes are active in the dashboard console: "Allocation is currently being managed manually on the Operator Console."
- Windows Server 2012, Solaris 11 for Sparc and AIX 6.1 are now supported operating systems. Windows Server 2003, Red Hat Enterprise Linux 4 and Solaris 9 are no longer supported.
- The application server was upgraded to Tomcat 6.0.37.
- Command Line and Example Enablers now support the HTTP Feature. This allows the specification of URL patterns for routing.

- Custom Ant tasks are now available for building Components and Stacks. The tasks are bundled with the CLI.
- Runtime context variables, properties and bean methods are now sorted when returned by REST services or CLI commands.
- Component Instance numbering is now more compact and assigned numbers are reserved across Engine restarts.
- Component Instance numbering can now be enforced by an Enabler property. This property, `componentInstanceNumberingEnabled`, will cause Component activations to wait until Component deactivations have completed. This behavior can also be enabled with a Component or Enabler runtime context variable: `COMPONENT_INSTANCE_NUMBERING_ENABLED`.
- The default number of reporting database connections was changed from 10 to 15.
- Microsoft SQL Server 2010 and 2012 are now supported as reporting databases. Oracle 10g and Microsoft SQL Server 2005 are no longer supported.
- The Enabler guides now include sample distribution `grid-library.xml` files.
- Silver Fabric SDK API Javadoc is now generated using the Javadoc 5.0 tool.
- Dynamic grid library dependencies can now be specified as a comma separated list in the runtime context variable `DYNAMIC_GRIDLIB_DEPENDENCIES`.
- `Configure.xml` now supports 'Insert Before', 'Insert After', 'Insert At Beginning', and 'Insert At End' actions for regex replacements.
- Direct deployment of archives to running Enablers is now supported via the `ArchiveManagement` interface. Deployment can be initiated from the CLI, ant tasks or the REST API.
- Two new Enabler deactivation codes were added: `COMPONENT_POLICY_CHANGED_EXPECTED_ENGINE_COUNT_LOWERED` and `COMPONENT_REMOVED_FROM_STACK`.
- The Engine checkpoint directory for application logs has been renamed to `checkpoint-<engine hostname>-<engine instance>`.
- Scripting support was added for configuring archives before deployment: `configureArchive(archiveFile, configureXml)`.
- Enabler processes can now be reported to the Engine for appropriate handling upon Enabler shut down or crash. The Enabler will also be notified when managed processes start and stop.

- Grid Libraries now support the `<system-class-path/>` tag. Engines will restart in the beginning of Component activation and append any values to the Java system class path.
- The Engine log level can now be changed in the Daemons page without restarting the Engines.
- Engine Daemon to Broker SSL communication now uses OpenSSL 0.9.8y.
- The ASP.NET Enabler now supports IIS 8.0 on Windows Server 2012.
- Red Hat JBoss EAP 6 Enabler is now supported.
- Archive scaling and management support was added to the JBoss Enablers.
- HornetQ configuration options are now available in the clustering feature info in the Admin UI.
- VirtualRouter log files are now available from the Diagnostics page in the Admin UI.
- Variable substitution is now supported in routing prefixes and relative URL patterns.
- VirtualRouter now connects to the Broker with it's fully qualified domain name unless explicitly setting the system property `-Dds.FabricClientLoginPlugin.fqdn=false`.
- A new table, `allocation_details`, was added to the reporting database schema. The Admin UI Allocation Reports page shows this additional detail of allocation events.
- The included Jython scripting engine was updated to version 2.5.3.
- Skyway now supports a Unique Locator field for Enablers that support the context variable `COMPONENT_UNIQUE_LOCATOR`.
- The Spotfire Enabler now has a custom wizard for easier configuration of Components.
- WebLogic 12.1.1 Enabler is now supported.
- WebSphere 8.5 Enabler is now supported.

## Release 5.0

- CLI and REST support was added for registering script statistics in Components and Enablers.
- `StackAdmin.getEffectivePolicy()` now returns an array of policy information.

- The previous set of SOAP web services are now exposed as JSON encoded REST services.
- The Grid Library Locations page is now available in read-only mode on a failover Broker.
- Google Chrome is now a supported web browser.
- The 'Engines' and 'Allocation Engines' fields in the Cloud Info panel of the Dashboard Overview page is now available to account users. Idle Engines and Engines running the user's Component are also available in the Engines page.
- Apple Safari is now a supported web browser.
- Editing pages now warn the user when navigating away from the editing session.
- Applications are now called Stacks. Application Components are now called Components.
- Deploy and Undeploy actions have been renamed to Publish and Unpublish.
- Tables in the Broker UI have a new look and feel.
- Private Cloud Manager has been replaced with Skyway. Skyway enables users to easily control provisioning of Stacks to the Silver Fabric Broker.
- DisplayName and DisplayOrder annotations are now available for FeatureInfo implementations that want property ordering in the FeatureInfo editor.
- The Diagnostics and Current Log pages have been moved to a new Diagnostics tab. The default time span has also been changed to one day.
- Component Dependency Rules now support Pack by host.
- When enabled, the dependent instances will run on the same host.
- Fault tolerance feature is now available for Enablers that run with exactly two instances and require the host information of the other instance at activation time.
- Component Separator tags now allow a user to define a list of arbitrary tags such that no two Components marked with the same tag will be allowed to run on the same host.
- Allocation events are now posted when no Engines are logged in to the Broker.
- The AssetManager API can now advertise 'Available processing units' to provide resources to Skyway.

- The OS attribute in `grid-library.xml` now supports a comma separated list of operating systems.
- Grid library extraction and load order now takes the dependencies into consideration.
- Stacks now support a new set of template properties for provisioning in Skyway.
- The Broker root directory is now `fabric`.
- 'Component Instance' is now available to Enablers in the `ActivationInfo` and as a runtime variable for designating the instance number of the Component.
- The Broker can now scale archives across Components based on archive statistics rules.
- The Broker and Engine now support Java 1.7.
- The Example Stack is now stopped by default.
- `Container.doCapture()` was added to the Enabler life cycle.
- The CLI `listRulesForPolicy` command was added to help with the format required for the `removeRuleFromPolicy` command.
- The `listEnablerScripts` and `removeEnablerScripts` CLI commands were added to remove Component and Enabler scripts.
- The CLI can now remove grid libraries through a REST service.
- The CLI `uploadGridlib` command now fails before uploading the archive when the `overwrite` flag is set to `false` and the grid library already exists.
- Component Types are now versioned. Enablers can provide a `DomainTypeUpgrade` implementation for upgrading Components from one Component type version to another.
- The 'Scripting Database Example' and 'J2EE Example' Components now include script that retrieves script-provided statistics.
- The example database Component now use scripting instead of the Command Line Enabler.
- Sybase 12.5 is no longer supported as a reporting database.
- The installation guide now provides an example init script for Engines running on Linux platforms.
- The `grid-library.xml` XSD is now packaged with the SDK.
- The `container.xml` DTD is now packaged with the SDK.
- The `configure.xml` XSD is now packaged with the SDK.



- Enabler configuration now supports non-Java archives in `FileArchiveFeatureInfo`.
- `ActivationInfo` can now be dynamically updated from a running Enabler through the Enabler SDK. This information will be propagated to `VirtualRouter` and other load balancers.
- Variable `RESTART_ENGINE_ON_DEACTIVATION` allows restarting the Engine upon deactivation of the Component.
- Enablers that require JDK 1.5 are no longer supported: Websphere 6.1, JBoss Application Server 4.2.1, JBoss Enterprise Application Platform 4.3 and Tomcat 5.5.
- `ProcessWrapper` command line arguments can now be hidden in the log by setting the property `showProcessCmdLog` or the variable `SHOW_PROCESS_COMMAND`.
- `Container.getShutDownReason()` now returns the reason why the Engine is deactivating.
- Software patches can now be packaged as grid libraries and applied to Enablers while they are running.
- Velocity now logs to `velocity.log` on the Engine.
- The Engine Daemon will now reconnect to Engine processes upon crash instead of restarting them.
- Added `-XX:MaxPermSize=128m` to `JAVA_OPTS` for JBoss EAP 5.0.0 Enabler, to avoid PermGen issue when deploying ears on linux64.
- `VirtualRouter` now supports a context-aware routing algorithm at the Component level that bases routing decisions on a map indicating the type of requests that have been loaded on certain endpoints. Users can also set Component-specific balancing strategies, Component-specific session indicators, and application session identifiers.
- `VirtualRouter` now supports routing prefixes without defining relative URL patterns.
- More logging was added for grid library locations on the Engine during test mode.
- New tables and columns were added to the reporting database schema: `additional_engine_info`, `broker_id` in `engine_stats`, `priority` in `allocation_stats`, `engine_allocation_stats` and `engine_domain_stats`.
- REST services were added for removing Component and Enabler scripts.
- Non-recurring schedules now support a start and end date.

- WebSphere Enablers now support SSL without having to first capture the Component.

## Changes in Functionality

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For details on changes in functionality since the last major release of this product, see the section Upgrading Silver Fabric in the *Silver Fabric Installation Guide*.

## Deprecated and Removed Features

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For details on deprecated and removed features since the last major release of this product, see the section [Upgrading Silver Fabric](#) in the *Silver Fabric Installation Guide*.

## Migration and Compatibility

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For details on how to migrate from a previous release to the current release, see the section Upgrading Silver Fabric in the *Silver Fabric Installation Guide*.

## Closed Issues

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The tables in this section list issues that were closed in the named releases.

### Admin API

Closed in Release	Key	Summary
5.6.0	FS-8502	The Engine Daemon logs are no longer missing from the <code>/daemons/id/log-urls</code> REST service.
5.6.0	FS-8519	<code>CONTAINER_NAME</code> , <code>CONTAINER_VERSION</code> , and <code>DOMAIN_NAME</code> in <code>AllocationInfo</code> have been deprecated and replaced with <code>ENABLER_NAME</code> , <code>ENABLER_VERSION</code> , and <code>COMPONENT_NAME</code> .
5.6.0	FS-8556	<code>ManagerAdmin.getLicenseInfo()</code> and <code>FabricLicenseInfo</code> are now deprecated.
5.5.1	FS-7975	The CLI, REST and custom Ant tasks now provide the ability to start, stop and undeploy archives by specifying deployment criteria. Previously this was done by specifying the Engine ID and instance where the archive was initially deployed. The new CLI methods are <code>deployArchiveByEngine</code> , <code>startArchiveByCriteria</code> , <code>stopArchiveByCriteria</code> , and <code>undeployArchiveByCriteria</code> . The new REST methods are <code>/engines/{daemon-id}/{engine-instance}/archives</code> , <code>/engines/archives/{archive-name}/start</code> , <code>/engines/archives/{archive-name}/stop</code> , and <code>/engines/archives/{archive-name}/undeploy</code> . The new custom Ant tasks are <code>sf:archive-deployment-byengine</code> and <code>sf:archive-deployment-bycriteria</code> that support <code>deploy</code> , <code>start</code> , <code>stop</code> and <code>undeploy</code> actions. The previous task <code>sf:archive-deployment</code> has been deprecated.
5.5.1	FS-8160	<code>StackAdmin.getComponentAllocationMap()</code> will no longer return Engine data that is inconsistent with the allocation map. That is, the information will not be generated in the middle of an allocation cycle.
5.5.0	FS-7408	Application logs are no longer missing from REST and Admin API Engine log URL requests to Engines that are not running Components.

Closed in Release	Key	Summary
5.5.0	FS-7444	A Component Type that is not supported by the given Enabler can longer be specified when creating a Component in the Admin API or REST.
5.5.0	FS-7570	Component names are now validated case-insensitively in the Admin API.
5.5.0	FS-7580	The ComponentAdmin was not available from the Admin API on the Engine.
5.0.1	FS-6920	<code>StackArchiveScalingAdmin.updateRuleMax()</code> no longer places the targeted rule at the end of the precedence order.
5.0.1	FS-7004	The Broker no longer throws a <code>NullPointerException</code> when trying to set the mode of many Stacks from the Admin API at the same time.
5.0.0 HF-1	FS-6912	Instantiating <code>ArchiveScalingRuleInfo</code> objects on the Engine no longer throws <code>NoClassDefFoundError</code> .
5.0.0 HF-1	FS-6922	<code>ArchiveScalingAdmin</code> and <code>StackArchiveScalingAdmin</code> no longer throw 'Access denied' when calling from the Engine.
5.0.0 HF-1	FS-7002	The Broker no longer throws a <code>NullPointerException</code> when trying to set the mode of many Stacks from the Admin API at the same time.
5.0.0	FS-3716	The Subscriber class is no longer missing from the SDK JavaDoc.
5.0.0	FS-4137	Adding or updating a Component through the API no longer succeeds on bad input.
5.0.0	FS-5894	<code>ScheduleAdmin.getSchedules()</code> no longer throws a <code>NullPointerException</code> via JMX when the Broker has no schedules.
5.0.0	FS-5926	A running Component can no longer be assigned to a different account.
5.0.0	FS-5996	<code>ApplicationAdmin.getEffectivePolicy()</code> no longer returns an empty list of component allocation information when called from an Asset Manager or Server Hook.
5.0.0	FS-6041	<code>FabricEngineInfo</code> is no longer missing the testing states.
5.0.0	FS-6080	<code>FabricEngineInfo.isCapturing()</code> no longer returns false even when the Engine is capturing.

## Admin Security

Closed in Release	Key	Summary
5.6.0	FS-8306	The admin user can now be edited when using LDAP.
5.5.1	FS-8042	The LDAP connection user password is no longer viewable in clear text.
5.5.0	FS-6899	The dashboard drill down and panel permissions have all been consolidated into a single permission: Dashboard View.
5.5.0	FS-7395	The Schedule action 'Clone from baseline' is now restricted to the 'Schedule Edit' permission.
5.5.0	FS-7618	Publishing a schedule in the Admin UI no longer requires the Schedule Edit permission.
5.0.1	FS-6201	Accounts can now be associated with multiple LDAP groups.
5.0.0	FS-4203	A failed login attempt no longer shows an incorrect error message.
5.0.0	FS-5605	The Client Download role permission is no longer located under the wrong category.
5.0.0	FS-6308	The Client Download permission is no longer under the Users category in the Role editor.
5.0.0	FS-6312	The System View permission was renamed to Engines View.

## Admin UI

Closed in Release	Key	Summary
5.6.0	FS-7410	When a user login expired, clicking on a copy action did not bring the user to the login page.
5.6.0	FS-7835	Removing an SNMP server no longer chooses the wrong entry when multiple entries have the same server name.
5.6.0	FS-7845	The Administration Tool tabs no longer hover to open.
5.6.0	FS-8146	The Engines > Properties editor now has the correct label 'Value' instead of 'Description'.



Closed in Release	Key	Summary
5.6.0	FS-8171	The description of the "User Events" permission was changed to indicate the action is available on the User Admin page, and the permission was moved to the "Users" tab.
5.6.0	FS-8221	Primary and secondary Broker URL validation can longer be skipped when using the enter key instead of clicking the save button.
5.6.0	FS-8261	The Distributions page no longer throws an NPE soon after removing a grid library.
5.6.0	FS-8311	The browser hint "autocomplete='off'" for the password field on the login page can now be set in the Broker Configuration page.
5.6.0	FS-8391	Session timeout on the role editor page no longer continuously prompts the user for login credentials.
5.6.0	FS-8406	The LDAP Server password is no longer shown in clear text after it has been changed.
5.6.0	FS-8483	Enablers page lock message no longer contains extra '#####' characters.
5.5.1	FS-8040	The 'Create new role' action was unavailable while the Broker was locked.
5.5.1	FS-8085	Firefox and Chrome browsers will no longer attempt to auto complete password fields for various UI wizards.
5.5.1	FS-8106	Newlines in Stack fields are now converted to white space.
5.5.1	FS-8148	The Daemon property editor/viewer was improperly displaying the value field as a description field.
5.5.1	FS-8177	The EULA popup no longer shows HTML tags in the window title for certain browsers.
5.5.0	FS-6623	The reporting database type selector in the Broker configuration page specifies Sybase 12 but it is no longer supported.
5.5.0	FS-6932	The Broker configuration property 'Synchronize Resources To All Broker' is no longer configurable since it cannot be disabled.
5.5.0	FS-7023	The Stack copy dialog no longer says copyApplication.

Closed in Release	Key	Summary
5.5.0	FS-7048	The Broker configuration property 'Archive Scaling Frequency' now properly describes the units as milliseconds.
5.5.0	FS-7061	Editing an object in the Admin UI no longer locks more than the given object.
5.5.0	FS-7068	Clone Stack dialog on the Stacks page now sorts the account names and filters out the accounts that already contain a copy of the Stack.
5.5.0	FS-7086	The archive scaling rule editor now filters the statistic dialog based on the Component type chosen.
5.5.0	FS-7176	The Admin UI no longer locks solely on the Enabler name. It now locks on name and version.
5.5.0	FS-7189	The archive scaling rule editor now filters out non-default statistics.
5.5.0	FS-7220	The 'Available Units' can now be sorted on the Assets page.
5.5.0	FS-7226	The global actions on the Engines page no longer uses stale parameters when performing 'on page' actions after adjusting the page size.
5.5.0	FS-7339	The advanced tab in the archive scaling rule editor now shows the parsed Component name and account.
5.5.0	FS-7369	The statistic editor in the Enabler wizard is no longer missing the 'default' property.
5.5.0	FS-7384	Engine property, Department and Location pages now validate against invalid XML characters.
5.5.0	FS-7391	The Component wizard no longer throws a page error when two users are trying to create two Components with the same name at the same time.
5.5.0	FS-7407	Schedules with spaces in the name can now be added to Stacks.
5.5.0	FS-7538	The column number in the table column selector is no longer too light to see when selected.
5.5.0	FS-7542	Deleted users are no longer still referenced in the account they were assigned.

Closed in Release	Key	Summary
5.5.0	FS-7559	A message is now printed in UI when an attempt to delete a role fails because that role is in use.
5.5.0	FS-7655	The document link to the Silver Fabric SDK Javadoc no longer says FabricServerSDK.
5.5.0	FS-7660	The change Enabler dialog on the Components page now sorts the options in ascending order.
5.5.0	FS-7687	The 'Edit Account' dialog loses mouse focus in IE10.
5.5.0	FS-7689	Removing an allocation constraint from a Component no longer keeps the Component locked until the lock expires.
5.0.1	FS-6795	The Properties tab of the Stack Builder no longer truncates long Component names.
5.0.1	FS-6915	The 'View all Subscribers' button on the Subscribers page displayed as text.
5.0.1	FS-6948	The message field in the template validation dialog was not required and would cause a failure to save the Stack when empty.
5.0.1	FS-7072	Archive statistics are no longer available in Activation Threshold rules.
5.0.1	FS-7139	Archive statistics are no longer available in Activation Threshold rule editors.
5.0.1	FS-7196	The Archive Scaling View Rule action of the Stack Builder no longer throws a JavaScript error.
5.0.0 HF-1	FS-6868	VirtualRouter can now be forced to use a fully qualified domain name when logging into the Broker by setting the Java system property '-Dds.FabricClientLoginPlugin.fqdn=true'. The Java system property '-Dds.HostnameUtils.hostnameLookup=com.datasynapse.fabric.util.EC2HostnameLookup' should also be set if an external host name lookup is needed.
5.0.0	FS-4197	The Engine instance column on the Engines page was not sorting numerically.
5.0.0	FS-4947	Select boxes were not aligned properly on many UI pages.

Closed in Release	Key	Summary
5.0.0	FS-5284	Some select boxes were not reset after creating a pop-up window.
5.0.0	FS-5400	The case was not consistent for many True/False selects.
5.0.0	FS-5902	The advanced search on the Users page did not work for all search patterns.
5.0.0	FS-5923	Several entries are no longer duplicated in the Help index page.
5.0.0	FS-5932	The Authentication page no longer flashes when switching modes on Firefox.
5.0.0	FS-5933	The Dashboard Stacks page no longer lists Components running in the Ad Hoc Stack that are not part of the user's account.
5.0.0	FS-5937	'View User Entry' action on the Sessions page listed no entries on the Users page.
5.0.0	FS-5943	Advanced search on the Dashboard Utilities page doesn't support case-insensitive search.
5.0.0	FS-5944	The Terms of Use page was not resizable in IE.
5.0.0	FS-5946	Search controls no longer disappear on some table pages.
5.0.0	FS-5947	The Allocation Monitor did not show historical data for account users.
5.0.0	FS-6113	Engine with a dash in the host name no longer causes an error on the Engine Charts page.
5.0.0	FS-6158	NaN and infinity are no longer allowed to be returned from statistic providers.
5.0.0	FS-6203	Schedules start date is no longer sorted by the string representation of the date.
5.0.0	FS-6221	The Asset Manager panel in the Dashboard was displayed in random order instead of being sorted by name.
5.0.0	FS-6348	If a Component is active because it's referenced in exactly one running Stack, stopping that Stack would not override any changes that may have been made in the console and the Component would not stop.
5.0.0	FS-6383	The failover Broker was labeled secondary on the setup pages.

Closed in Release	Key	Summary
5.0.0	FS-6481	'Drain Daemon' action on the Daemons page was removed for offline daemons.
5.0.0	FS-6681	Subscribers on the Subscriptions page are no longer removed when saving without selecting an event.

## Admin Validation

Closed in Release	Key	Summary
5.0.0	FS-4189	The Admin API was not validating Component Options for invalid data.
5.0.0	FS-6112	The account LDAP field validation no longer prevents commas.

## Allocation Algorithms

Closed in Release	Key	Summary
5.6.0	FS-7823	The Broker no longer logs an IndexOutOfBoundsException when a user adds or removes a Stack during allocation.
5.6.0	FS-8301	NPE is no longer thrown from the allocator when using a Resource Preference Rule with properties that aren't set on an Engine.
5.5.1	FS-7961	The allocator will no longer deactivate running Components to free up resources when the desired Component is currently reserved to an Engine that is restarting.
5.5.0	FS-6698	Enablement conditions that use allocation statistics will not fail over correctly since the allocation statistics will not exist before the first allocation cycle.
5.5.0	FS-7353	Allocation can no longer be triggered when the Broker is starting and waiting for active Engines to log in.
5.5.0	FS-7615	Engines reservations are now cancelled upon successful Component activation. This speeds up allocation to other hosts when the Enabler crashes before the reservation timeout.
5.0.0	FS-6300	Engines will no longer get reserved to a Component if it gets blacklisted from that Component.

## Ant Tasks

Closed in Release	Key	Summary
5.6.0	FS-8179	Archive deployment now consistently and rigorously enforces precondition checking before executing any deployment tasks (deploy, start, stop, undeploy)
5.6.0	FS-8222	The update action for the context-variable custom Ant task no longer requires the entire list of variables to be specified; new variables will be added, existing variables will be updated and variables not specified will be untouched.
5.6.0	FS-8226	The following Ant task now support partial updates such that existing options will be updated, new options will be added and options not specified will be left alone: sf:context-variable, sf:default-settings, sf:config-file, sf:feature, sf:option, sf:schedule, sf:schedule-interval.
5.6.0	FS-8374	The Ant task sf:alloc-constraint now supports the property attribute described in dev guide.
5.6.0	FS-8533	Strict validation of archive names can now be disabled in the Administration Tool at Broker > Config > Archive Deployment Repository. This is needed when running archive stop or undeploy commands on Enablers that expect archive name arguments that are different from the DeployArchives and RunningArchives lists on the Engine.
5.6.0	FS-8543	"java.lang.ClassCastException: java.lang.String cannot be cast to java.math.BigInteger" is no longer thrown when using the sf:component-capture Ant task.

## Archive Scaling

Closed in Release	Key	Summary
5.5.0	FS-7431	The archive scaling timeout message is no longer missing the scale direction.
5.0.1	FS-6951	Target host conditions now support "Same enabler and middleware Version".

Closed in Release	Key	Summary
5.0.1	FS-6991	Archive scaling rules would not select Component instances that didn't generate the given archive statistic.
5.0.1	FS-6992	Target Host Conditions now list native statistics by their correct names.
5.0.1	FS-6993	The Component instance selection operator for add/remove conditions was reversed.
5.0.1	FS-7019	The aggregator chooser in the Component and Enabler editor now only shows relevant choices for the type of statistic being added.
5.0.1	FS-7031	Non-scaled archives will no longer be scaled down when the Component instance reports an archive ID in the archive statistics.
5.0.1	FS-7056	Archive scaling rules would not scale down archives that did not generate the specified statistic.
5.0.1	FS-7079	Archive scaling events now timeout on the Broker allowing additional scaling events to be called at a later time.
5.0.1	FS-7083	The Archive Scaling rule editor text was updated for clarity.
5.0.1	FS-7094	The scaled archive list can now be updated outside of <code>scaleUp/scaleDown</code> by returning the appropriate <code>ArchiveDetail</code> from <code>detectArchives()</code> .
5.0.1	FS-7095	Statistics are no longer required in the Add Archive Conditions and Remove Archive Conditions tabs for determined which archive to add or remove.
5.0.1	FS-7118	The number of scaled archives can no longer exceed the rule max when demand still exists but the rule setting was changed to below the current scaled count.



## Asset Provisioning

Closed in Release	Key	Summary
5.6.0	FS-8093	The Admin API is now available during Asset Manager initialization.
5.5.0	FS-7064	<code>AssetManager.handleAllocation</code> is now called even when the effective policy is empty.
5.5.0	FS-7066	When the allocation is skipped, <code>AssetManager.handleAllocation</code> is no longer called with a stale <code>AllocationMapInfo</code> object. It is now called with an empty <code>AllocationMapInfo</code> object.
5.5.0	FS-7217	The VMware Asset Manager will no longer send duplicate power off message to virtual machines that left the Asset Manager in a bad state.
5.5.0	FS-7517	<code>AssetManager.handleComponentInstanceUpdated</code> is now properly called on a change to an Engine's <code>ActivationInfo</code> .
5.0.1	FS-4487	The detail view of the VMware asset manager no longer becomes stale when there are no active Components.
5.0.1	FS-4616	The VMware asset manager detail view was not sorted.
5.0.1	FS-6684	VMware vSphere 5 is now supported.
5.0.0	FS-5664	Asset Manager status will no longer be enabled if init fails.
5.0.0	FS-5738	Text validation was missing from the Asset Manager property editor.
5.0.0	FS-5878	VMware connection problems with Axis no longer requires a Broker restart to reset.
5.0.0	FS-6542	The time between VM power off and VM destroy was increased to eliminate issues with trying to destroy a VM that hasn't fully shutdown.
5.0.0	FS-6587	Asset Manager details did not update until the they were hidden and expanded again.

## Broker

Closed in Release	Key	Summary
5.6.0	FS-7821	When "Clear all cached archives on Broker shutdown" was set at "Config > Broker > General > Archive Repository", previously cached archives were not cleared when the Broker shut down.
5.6.0	FS-7854	Because licenses are now autogenerated on install, the license upload feature was removed from the Administration Tool.
5.6.0	FS-7981	The 'Create new role' action was unavailable while the Broker was locked.
5.6.0	FS-8164	Component Instance Numbering edge case issues related to Engine log off were resolved.
5.6.0	FS-8195	When upgrading, if a JDK without unlimited strength JCE libraries was changed to one with unlimited strength JCE and encrypted variables were used, an IllegalBlockSizeException would occur on Engines. To remedy this, encrypted repository files are now automatically upgraded to be encrypted if they are found to be unencrypted.
5.6.0	FS-8254	Broker to Broker and VirtualRouter to Broker socket communication port ranges is now configurable as a Broker Config option instead of using ephemeral ports. For external VirtualRouter, the Java system property 'ds.externalVR.portRange' must be set to the desired port range.
5.6.0	FS-8367	The deprecated constants and methods for ActivationInfo CONTAINER_NAME, CONTAINER_VERSION, and DOMAIN_NAME were removed.
5.6.0	FS-8413	Windows XP is no longer supported.
5.6.0	FS-8460	The Engine JREs and Enabler JDKs have been updated to 1.7u55.
5.5.1	FS-8002	Creating Components through REST with the display name of a feature no longer throws an NPE. The display name and the property name are now both valid.
5.5.1	FS-8016	Enabling LDAP user authentication on the Broker no longer causes some Admin API methods to fail on the Engine.

Closed in Release	Key	Summary
5.5.1	FS-8021	Manual Engine upgrade mode can now be skipped during patch installation with the new flag <code>--manual-engine-upgrade-disabled</code> .
5.5.1	FS-8024	The Broker no longer logs an <code>IndexOutOfBoundsException</code> when a user adds or removes a Stack during allocation.
5.5.1	FS-8032	The Tomcat APR libraries for Solaris Sparc and X86 no longer cause the Broker to fail to start.
5.5.1	FS-8037	The default admin database backup cron has been changed to '0 */15 * * * ?'. Additional recommended production settings have been added to the descriptions for Config > Broker > General > Allocation > Initial Wait Interval and Failover Wait Interval settings.
5.5.1	FS-8058	The Broker SMTP client can now be configured with additional JavaMail properties stored in <code>fabric/livecluster/WEB-INF/config/mail.properties</code> .
5.5.1	FS-8083	HTTP threads can now include the IP address and client information in the name. This is useful when generating thread dumps for troubleshooting network problems. To enable this, use the Broker Config > Logging setting 'Set the Message Thread Names'. This takes effect immediately. Note that you should only enable this when troubleshooting, as it can have a performance impact.
5.5.1	FS-8100	Engine logs can now be proxied through the Broker when enabling the Broker Config > Engine and Clients > Miscellaneous > Proxy for Engine Logs setting.
5.5.1	FS-8127	Component Instance numbers are now properly released during certain shutdown conditions.
5.5.1	FS-8155	The Java system property <code>'ds.ComponentInstanceManagerPlugin.cisn'</code> can now be specified on the Broker to force Component instance numbers to zero when the Component's Stack policy <code>max=1</code> and Component instance number is enabled for the particular Component.
5.5.0	FS-7042	Skyway Stack provisioning will now verify that all grid libraries are signed before starting to guarantee that the Engines have synchronized the libraries.

Closed in Release	Key	Summary
5.5.0	FS-7186	Component instances numbers were not released when an Engine running a Component was killed from the Admin UI.
5.5.0	FS-7192	NPE is no longer thrown from GridlibAttributeScorer when a Stack is missing a grid library.
5.5.0	FS-7259	'No such property: lockToken' is no longer printed at Broker start.
5.5.0	FS-7465	3rd party licenses are no longer included in etc/licenses. They are available in the Terms of Use page.
5.5.0	FS-7466	All tar archives are now packaged with a newer version of maven that doesn't pad the end with junk bytes.
5.5.0	FS-7521	Scripting languages that report a space in the version, like JRuby, no longer get saved incorrectly in the Component or Enabler.
5.5.0	FS-7571	Adding an updated version of a grid library distribution to the Broker no longer causes an NPE.
5.5.0	FS-7594	The AIX JRE configure script, configureAIX.sh, now exits with the correct message and code when unzip fails.
5.5.0	FS-7705	Engines can now connect to the Broker when using NAT translation.
5.0.2	FS-7355	Allocation can no longer be triggered when the Broker is starting and waiting for active Engines to log in.
5.0.2	FS-7398	The IBM AIX operating system is now supported by the Silver Fabric Broker.
5.0.1	FS-6954	Component instance numbers were not released after an activation or deactivation timeout.
5.0.1	FS-7067	Component instance numbers were not correctly released when logging back into the primary Broker that hasn't restarted.
5.0.1	FS-7098	Component instance number will no longer be duplicated across Components when a Stack is stopped and then immediately started.
5.0.1	FS-7107	Component instance numbers were not always released when using ordered shutdown in a Component dependency rule.

Closed in Release	Key	Summary
5.0.1	FS-7219	Component instances numbers were not released when an Engine running a Component was killed from the Admin UI.
5.0.0	FS-5936	Ctrl + C could not stop the Broker when running in the foreground.
5.0.0	FS-5994	A malformed <code>grid-library.xml</code> no longer stops extraction of all grid libraries.
5.0.0	FS-6134	Tivoli configuration files were removed and no longer supported.
5.0.0	FS-6139	Contact information is no longer outdated in the MIB.
5.0.0	FS-6296	The Engine reservation expiration message is no longer printed when the timeout is set to zero.
5.0.0	FS-6364	GRIDSERVER_TOMCAT_OPTS was renamed to FABRIC_TOMCAT_OPTS in the Tomcat startup scripts.
5.0.0	FS-6368	Components and Enablers will no longer be available in the UI once a corrupted grid library is detected.
5.0.0	FS-6477	Enabler operating system was not taken into account when choosing Engines during allocation.
5.0.0	FS-6602	The Broker no longer deadlocks when performing a 'Restart Component' on many previously allocated Engines at once.
5.0.0	FS-6609	The archive exported from the Import/Export page was renamed to SilverFabric.
5.0.0	FS-6622	'ClassNotFoundException when attempting to save...' is no longer thrown when saving a modified TIBCO BW container.
5.0.0	FS-6666	Encrypted folders were missing in a default install until a Component is created that uses encrypted vars.
5.0.0	FS-6717	Import/Export did not include Grid Library Locations.

## Build

Closed in Release	Key	Summary
5.6.0	FS-8130	The md5 for the full build was missing from the md5 file.

## Client

Closed in Release	Key	Summary
5.5.1	FS-8031	The managed process packaged is no longer missing from the SDK jar.

## Capture

Closed in Release	Key	Summary
5.0.0	FS-6105	Regular expressions that throw exceptions when applied to the specified files no longer cause an activation failure.
5.0.0	FS-6109	Capturing a file in the Enabler's root work directory no longer gives the file an invalid relative path.
5.0.0	FS-6137	Variables specified in <code>configure.xml</code> for capturing values were not updated for files that didn't have <code>xml</code> or <code>properties</code> extensions. File types are now interpreted based on the configuration types.

## Command Line Interface

Closed in Release	Key	Summary
5.6.0	FS-7728	The <code>copyEnabler</code> command no longer fails silently when the target name already exists.
5.6.0	FS-8237	The CLI command <code>listEngines</code> now displays the Engine ID.
5.5.1	FS-7973	While deploying an archive for continuous deployment, the exception "...has not been added to list of archives to watch for ingest status." will no longer be thrown.

Closed in Release	Key	Summary
5.5.1	FS-7983	The <code>listArchiveRules</code> no longer fails to execute due to an invalid comment character.
5.5.1	FS-8018	Properties for the CLI Wink REST client can now be passed in as Java system properties. For example, to increase the read timeout in cases where the operation may take a long time without uploading any bits: <code>fabric.bat/sh startArchive &lt;engine-id&gt; &lt;engine-instance&gt; &lt;archive-name&gt; -Dwink.client.readTimeout=60000.</code>
5.5.0	FS-7241	Failing to apply a patch now returns the correct code and exception message.
5.5.0	FS-7647	The development guide now indicates that the empty string, "", is used to designate the 'Manual Mode' policy when using the <code>listRulesForPolicy</code> command.
5.5.0	FS-7653	The Command Line Component wizard now indicates that a grid library or command directory is required.
5.5.0	FS-7661	The CLI no longer validates the name and version of the script engine specified in the <code>uploadScript</code> command.
5.5.0	FS-7751	The <code>gridlibVersion</code> argument is no longer optional in the <code>downloadGridlib</code> command.
5.0.0	FS-5875	The CLI <code>addComponent</code> command no longer creates a Component with invalid input.
5.0.0	FS-5880	'&&' and '==' characters are no longer allowed as input to the <code>addComponent</code> CLI command preventing undesired results.
5.0.0	FS-6527	CLI <code>uploadGridlib</code> command no longer throws and <code>OutOfMemoryError</code> when uploading large files.

## Components

Closed in Release	Key	Summary
5.6.0	FS-7818	The J2EE Example component can now be captured and activated.
5.5.0	FS-7672	The scripting example will now verify the process isn't null before waiting to shutdown in case the activation wasn't successful.
5.0.0 HF-1	FS-6937	Component instance numbers were not getting released after a required <code>grid-library.xml</code> <code>lib-path</code> restart or incompatible container restart.
5.0.0	FS-6711	The title of the HelloServlet in the 'J2EE Example' Component said 'Virtual Gateway' instead of VirtualRouter.

## Dashboard

Closed in Release	Key	Summary
5.6.0	FS-7800	The Dashboard Console Advanced Search now works as expected.
5.5.0	FS-7113	The dashboard select dialogs for statistic panels no longer force a selection if the dialog is open during an AJAX refresh.
5.0.1	FS-6738	'Engines Needing Update' was added to the Cloud Info panel.
5.0.1	FS-6767	Archive statistics are no longer shown in the Dashboard if it's corresponding Stack is stopped.
5.0.1	FS-6804	The Dashboard Archive Stats page now has history columns.
5.0.1	FS-6805	The Dashboard Overview page now has an Archives panel.
5.0.1	FS-6871	The dashboard statistic pages are no longer missing the right table border in Chrome and Safari.
5.0.1	FS-6874	Archive statistics are no longer available in the dashboard when the corresponding Stacks are stopped.
5.0.1	FS-6898	Account users can now see ad hoc archives and archive statistics belonging to their account in the Dashboard.



Closed in Release	Key	Summary
5.0.1	FS-6919	The Default button on the column chooser for the Utilities Dashboard page didn't work.
5.0.1	FS-7020	Using an invalid aggregator for archive statistics will longer keep the the Dashboard Archive Stats page from loading.
5.0.1	FS-7088	The Dashboard Archives page was renamed to Scaled Archives.
5.0.1	FS-7214	The Archive Stats panel no longer shows archives that haven't reported statistics in the last minute.

## Database

Closed in Release	Key	Summary
5.0.0	FS-5726	Reporting database scripts for Oracle no longer named for 10g only.
5.0.0	FS-6226	Changing a database cleanup cron setting on the Broker no longer throws an error and no longer requires a restart.
5.0.0	FS-6450	'Capture Failed' and 'Capture Successful' events were missing from the events reporting table.
5.0.0	FS-6640	Reporting database upgrade script altered the application table instead of the applications table.

## Documentation

Closed in Release	Key	Summary
5.6.0	FS-7876	The instructions in the Cloud Administration guide for generating Broker keypairs has been updated to use the correct values.
5.6.0	FS-7885	Documentation was improved for the <code>sf:stack-policy</code> Ant Task.
5.6.0	FS-8084	Documentation was added regarding port usage and security requirements.
5.6.0	FS-8124	Documentation PDF filenames were changed to match other TIBCO documentation.
5.6.0	FS-8299	A developer's tutorial guide was added.
5.6.0	FS-8305	JavaDoc is now included in the documentation package on the docs.tibco.com site.
5.5.1	FS-8092	Several classes such as ArchiveLocator are no longer missing from the SDK Javadoc.
5.5.1	FS-8096	Generics are no longer hidden in the SDK Javadoc.
5.5.1	FS-8119	Additional documentation was added to the install guide in regards to upgrades and applying and removing hotfixes.

Closed in Release	Key	Summary
5.5.0	FS-6930	The developer's guide now lists the correct arguments for the CLI command <code>setStackMode</code> .
5.5.0	FS-7403	The guides now include a glossary.
5.5.0	FS-7592	The dev guide now lists the proper return types for script method <code>getStatistic</code> : <code>ArchiveStatistic</code> , <code>ArchiveStatistic[]</code> for archive statistics and <code>double</code> , <code>String</code> or <code>Statistic</code> for Component statistics.
5.0.2	FS-7401	The free disk requirements for Sun SPARC Platforms in the readme was too low.
5.0.1	FS-7142	Javadoc for <code>PatchDetail</code> and <code>PatchTargetDetail</code> is no longer missing.
5.0.1	FS-7230	Documentation was added warning against creating allocation rules with statistic sampling windows smaller than the collection frequency.
5.0.0	FS-6155	The <code>readme.txt</code> no longer claims Solaris x86 11 support.

## Enablers

Closed in Release	Key	Summary
5.6.0	FS-6877	The runtime context variable <code>INCOMPATIBLE_CONTAINERS</code> has been deprecated. <code>INCOMPATIBLE_CONTAINERS</code> should be used instead.
5.6.0	FS-8151	The J2EE Example Component now uses the 5.6 version of the Tomcat 6 Enabler. Previous versions of Silver Fabric that install with the JAR archive will need to upgrade the example to the newer Enabler using the Change Enabler action on the Components page.
5.6.0	FS-8310	The order of properties in an Enabler's config file were sometimes reordered. Property order is now retained. Note that comments in a properties file are still stripped.
5.6.0	FS-8446	The <code>ArchiveLocator</code> class has been changed to allow arbitrary URL strings to be specified instead of exclusively using the <code>java.net.URL</code> class. In particular, <code>setURL()</code> and <code>getURL()</code> have been changed to set the URL string and return the URL string instead.
5.5.1	FS-7969	The <code>DOCTYPE</code> declaration for XML files processed by file configuration is now maintained even if only one of the <code>PUBLIC</code> or <code>SYSTEM ID</code> attributes are specified.
5.5.1	FS-8041	The runtime context variable <code>DEFAULT_LOG_PATTERNS</code> can now be specified on the Component or the Enabler to provide the list of default log file patterns available in the Component wizard. The default delimiter is a comma but can be changed with the runtime context variable <code>DEFAULT_LOG_PATTERNS_DELIMITER</code> .
5.5.1	FS-8044	Removing a Component from the Ad Hoc Stack now sets the proper deactivation code on the Enabler: <code>COMPONENT_REMOVED_FROM_STACK</code> .
5.5.1	FS-8162	The J2EE Example Component now uses the 5.5.2 version of the Tomcat 6 Enabler. Previous versions of Silver Fabric that apply the service pack with the jar will need to upgrade the example to the newer Enabler using the Change Enabler action on the Components page.
5.5.0	FS-7122	Enabler life cycle methods no longer need to set the context class loader before executing.
5.5.0	FS-7246	Patches can no longer be applied to Components or Enablers that don't have the patch property enabled.

Closed in Release	Key	Summary
5.5.0	FS-7379	The Engine now prints a warning message for empty <code>ConfigFiles</code> elements in <code>configure.xml</code> files instead of causing a failed activation.
5.5.0	FS-7433	Adding more than one node in an 'Add Node' action in the <code>configure.xml</code> no longer replaces '<' and '>' with entity references.
5.5.0	FS-7443	The Engine did not log the activation failure message when the <code>RESTART_ENGINE_ON_DEACTIVATION</code> flag was enabled.
5.5.0	FS-7460	<code>ScriptStatisticProvider</code> classes that are added by the UI when using script statistics are now documented in the SDK so they can be added manually.
5.5.0	FS-7555	<code>&lt;command-path&gt;</code> was removed from the <code>grid-library.dtd</code> since it is not supported.
5.0.1	FS-6933	<code>BROKER_URL</code> and <code>ContainerUtils.getSystemProperty(String)</code> are now available in the Engine runtime context for variable substitution.
5.0.0	FS-5359	Using a '\$' at the end of a regular expression in <code>configure.xml</code> no longer causes a parsing error.
5.0.0	FS-5838	Archives are no longer required to be specified in the <code>baseDir</code> attribute for <code>configFiles</code> in <code>configure.xml</code> .
5.0.0	FS-5976	Configuring XML files in the <code>configure.xml</code> did not preserve the DTD declaration.
5.0.0	FS-5981	Calling <code>checkpointApplicationLogs()</code> without defining log file patterns no longer throws an NPE.
5.0.0	FS-6032	<code>DeployArchive()</code> was only called when the <code>installArchivesViaFileCopy</code> property of the Archive Feature Info was set to true.
5.0.0	FS-6085	Log messages when using static routes instead of <code>HTTP_PORT</code> are no longer printed as warnings.
5.0.0	FS-6092	XPath attributes 'before' and 'after' were not resolved for velocity substitution in the <code>configure.xml</code> .
5.0.0	FS-6107	The variable <code>AIX_JAVA_OPTIONS</code> has been removed from the JBoss and WebLogic Enablers since it is no longer used.

Closed in Release	Key	Summary
5.0.0	FS-6118	Dependencies returned from <code>getDynamicGridlibDependencies()</code> were not copied to the work directory when <code>COPY_DEPENDENCIES_TO_WORK_DIRECTORY</code> was set to true.
5.0.0	FS-6166	The <code>grid-library.xml</code> <code>os</code> flag is no longer missing from TIBCO grid libraries which causes a warning level log message.
5.0.0	FS-6243	TIBCO Enablers are no longer missing description text.
5.0.0	FS-6444	XPath actions were not applied to all matching nodes, only the first.
5.0.0	FS-6521	Script engines were not validated for implementing the <code>Invocable</code> and <code>Compilable</code> interfaces.

## Engine

Closed in Release	Key	Summary
5.6.0	FS-7896	The Unix Engine installation archive now has a copy of <code>ssl.pem</code> and <code>ssl.keystore</code> so that it can connect to the Broker initially.
5.6.0	FS-8109	After disabling manual Engine upgrade after patching an installation, Engines did not upgrade and restart.
5.6.0	FS-8196	SSL host name verification no longer fails when using <code>*.domain</code> certificates.
5.6.0	FS-8303	<code>ManagedProcess</code> cleanup was done too early in the deactivation cycle. It is now triggered after <code>Container.cleanup</code> is performed.
5.6.0	FS-8372	Component Grid Library dependencies that are Component Types are filtered out when a Component runs, since they are added elsewhere. This would previously cause other versions of Component Type JAR archives to be loaded instead of specified ones when the Component ran.
5.5.1	FS-7813	<code>ManagedProcess.MP_RESTART</code> no longer restarts processes unnecessarily.
5.5.1	FS-8015	Engines will no longer restart when failing to log in to the Broker. This includes login exceptions like <code>"com.livecluster.gridserver.repository.RepositoryException: java.sql.SQLException: while creating new connection to jdbc:hsqldb:http://host:port/livecluster/admindb/, Access is denied 1004"</code> .
5.5.1	FS-8019	The HTTP sender timeout for Broker to Engine communication is now set to the read timeout, 120 seconds by default, in the Broker Config page: Communication -> HTTP Connections -> Engine -> Socket Timeout (seconds). It was previously set to 60 seconds.
5.5.1	FS-8149	An NPE is no longer thrown from the allocator when an external statistic is used by an enablement condition.
5.5.1	FS-8150	An NPE is no longer thrown from the allocator when an allocation statistic is used by an enablement condition.

Closed in Release	Key	Summary
5.5.0	FS-3469	Engines running on Solaris Zones now append the zoneid to the mac address to report a unique GUID. Solaris Zones does not report a unique mac address.
5.5.0	FS-7047	By default, all Linux64 Engines now use /dev/urandom instead of /dev/random for random number generation in Java. This eliminates the potential for Engines running on headless machines to hang at startup. An option has been added to the Engine JVM section of Unix Engine Configurations to restore to /dev/random if necessary.
5.5.0	FS-7136'	Unknown tag: patch-target, marking Grid Library as invalid' is no longer printed even when the patch was recognized and applied.
5.5.0	FS-7404	Engine test mode now supports multiple grid library locations.
5.5.0	FS-7492	The Solaris cURL library is now compiled with Studio11 to improve stability.
5.5.0	FS-7648	Solaris Sparc Engines will no longer fail to start on virtual machines that do not support psrinfo.
5.5.0	FS-7682	The Engine now shows the correct exception when an activation fails due to a missing grid library.
5.5.0	FS-7776	The UNIX Engine will no longer core dump when a DNS timeout occurs.
5.0.2	FS-7191	The IBM AIX operating system is now supported by the Silver Fabric Engine.
5.0.1	FS-7025	Enabler crash messages would not be sent to the Broker when the RESTART_ENGINE_ON_DEACTIVATION variable is used.
5.0.1	FS-7071	Engines will no longer get stuck restarting after logging into the Broker with a duplicate Component instance number.
5.0.1	FS-7146	AbstractArchiveStatisticsProvider no longer throws a NullPointerException when the evaluator doesn't return a statistic.
5.0.1	FS-7221	Engine instances would not start if the crash check file becomes corrupted during an ungraceful system shutdown: "Unable to recover invoke PID: 0".



Closed in Release	Key	Summary
5.0.0 HF-1	FS-5984	The Java system property '-Dds.HostnameUtils.hostnameLookup=com.datasynapse.fabric.util.EC2HostnameLookup' can now be set on an Engine to enable alternate host name lookup for the Engine and Engine Daemon Log Url List pages.
5.0.0 HF-1	FS-6938	Engines now properly restart after a Component activation failure.
5.0.0 HF-1	FS-6939	Engines no longer restart when receiving an UnknownHostException while trying to login to the Broker.
5.0.0	FS-3512	The CPU Utilization on Linux and Solaris Engines is no longer calculated incorrectly for certain collection frequencies.
5.0.0	FS-5175	The CPU count was incorrectly calculated for RHEL 6 Linux machines. This count was only displayed in the UI and was not used to determine the number of Engine instances in SMP mode.
5.0.0	FS-5877	Changing a <code>grid-library.xml</code> in an expanded grid library location no longer requires an Engine restart to take effect when using Engine test mode.
5.0.0	FS-6049	Non-default archive directories were not deleted upon Enabler shutdown.
5.0.0	FS-6069	Engines were not reserved for a Component when the Enabler crashes and the deactivation fails.
5.0.0	FS-6115	A custom StatisticsProvider for a Component or Enabler can no longer cause an Engine restart when it doesn't return and blocks the collection thread.
5.0.0	FS-6151	Engines were not reserved for a Component after a required <code>grid-library.xml</code> lib-path restart.
5.0.0	FS-6277	Components deployed to multiple Engines per Daemon no longer stop when Broker is shutdown/killed.
5.0.0	FS-6472	A small memory leak existed on the Broker when Engines failed to activate Components.
5.0.0	FS-6754	'Screen Saver' windows mode was removed from the Engine Configuration page.

## Failover

Closed in Release	Key	Summary
5.0.0	FS-5870	Editing users, accounts and roles is no longer available on a failover Broker.
5.0.0	FS-6580	Changing the Component utility status did not mark the Component as changed.

## IIS

Closed in Release	Key	Summary
5.6.0	FS-7787	Documentation was clarified with regard to the return values of the startArchive command-line command when using the ASP.NET Enabler.
5.5.0	FS-7680	A detailed log message was added for activation failures due to not defining a relative URL pattern.
5.0.0	FS-6007	New Container for Microsoft ASP.NET.
5.0.0	FS-6008	IIS Enabler now supports log file check pointing.
5.0.0	FS-6017	The IIS Enabler no longer re-copies the content files over the configured ones.

## JBoss

Closed in Release	Key	Summary
5.6.0	FS-7794	It is now documented that the Archive scaling with JBoss Archive Throughput statistics with JBoss 6 EAP and JBoss 7.1 Enablers only works with servlet hits and not html/jsp hits.
5.6.0	FS-7815	The archiveDetect() implementation for the JBoss 7.1 and EAP 6.0 Enablers returned ArchiveDetail objects with the "urls" field set. They are now set to null, as the urls are now properly returned by the urlDetect() method. The archive ID was also not set in the returned ArchiveDetail object. It is now set to 1.

Closed in Release	Key	Summary
5.6.0	FS-7960	The JBoss configure.xml was modified so that when HORNETQ_CLUSTERED is false, the value of /configuration/clustered is false; otherwise, the value of <code>{Clustering_Support.getHornetqClustered()}</code> will be used.
5.6.0	FS-8435	HTTPS did not work on JBoss 7.1.0 and JBoss EAP 6.0.0 when clustering was enabled.
5.5.1	FS-7909	Archives deployed directly to an endpoint can now be propagated to all instances of a JBoss cluster with a new continuous deployment property <code>START_ARCHIVE_CLUSTER=true</code> . This property is supported for all JBoss Enablers except EAP 6.0.0 and community 7.1.0.
5.5.1	FS-7900	Clustering was not properly set up in the JBoss 6.1 community Enabler.
5.5.1	FS-7943	JBoss Clustering Support was not able to be defined via the REST service.
5.5.1	FS-7950	Archive statistics may not be found when specifying the context in an ear but deploying the archive as the root context.
5.5.0	FS-7468	The hornetq-configuration.xml in JBoss 6 no longer uses the wrong value for cluster-user.
5.5.0	FS-7515	The Sticky Session properties in the cloud admin guide were incorrect for JBoss. The correct properties are <code>org.apache.catalina.JESSSESSIONID</code> in place of <code>org.apache.catalina.SESSION_COOKIE_NAME</code> and <code>org.apache.catalina.jsessionid</code> instead of <code>org.apache.catalina.SESSION_PARAMETER_NAME</code> .
5.0.0	FS-6002	New Container for JBoss 5.1.1 Enterprise Application Server (EAP).
5.0.0	FS-6005	New Container for JBoss 5.1 Application Server.
5.0.0	FS-6010	New Container for JBoss 7.1 Application Server.

## Load Balancing

Closed in Release	Key	Summary
5.6.0	FS-8097	Relative URL paths did not work when the admin port was using SSL but the Engine was not. VirtualRouter now will forward requests to the HTTP port of Engines if that's the only port available.
5.6.0	FS-8265	The port range for establishing socket connections to the Broker can now be set for standalone VirtualRouters using the property <code>DSCClientPortRange</code> in the <code>virtualrouter.properties</code> file.
5.6.0	FS-8298	Options were added to the VirtualRouter configuration so that accessing <code>/control/status.jsp</code> can be authenticated with a user's Broker credentials. This option is turned off by default.
5.5.1	FS-8014	Certain special characters in query strings are now properly decoded and encoded through VirtualRouter.
5.5.1	FS-8017	Cookies that use path attributes are now updated by Virtual Router with the correct context when using routing prefixes.
5.5.1	FS-8025	VirtualRouter no longer resets its routing map after it logs into a failover Broker. It will continue to route requests based on the previous map until the Broker performs a new allocation.
5.5.1	FS-8026	VirtualRouter no longer fails to route requests when the URL contains the following characters: '(', ')', '[', ]'.
5.5.1	FS-8028	VirtualRouter no longer fails to route requests when the routing prefix contains a space character.
5.5.1	FS-8176	Virtual Router no longer throws an NPE when checking for relative URLs on Component instances that haven't reported the data yet.
5.5.0	FS-6958	VirtualRouter now encodes the path and query of URLs before attempting to forward to Engines.
5.5.0	FS-7001	The static routes status page now displays the table properly when there are no entries.
5.5.0	FS-7281	External VirtualRouters no longer throw <code>UnknownHostException</code> when a Component relative URL is configured with a double slash.
5.5.0	FS-7356	The routing prefix is no longer removed when returning no URLs from dynamic archive detection.

Closed in Release	Key	Summary
5.0.1	FS-6803	VirtualRouter now supports additional HTTP methods: PUT, DELETE, and OPTIONS.
5.0.1	FS-6914	The log message when an incoming request doesn't match the context aware pattern for the component was changed from warning level to fine level.
5.0.1	FS-6987	VirtualRouter now supports Component instance specific context URLs.
5.0.1	FS-7210	ACTIVE_TUPLES was not set in VirtualRouter during the initial Component activation.
5.0.0	FS-6493	VirtualRouter will no longer fail to login to the Broker when Engines are logging in and out.
5.0.0	FS-6533	VirtualRouter did not route correctly to endpoints when the URL contains *.jspx.

## Logging

Closed in Release	Key	Summary
5.6.0	FS-8522	"No user authentication specified for BASIC realm" log message has been changed from Severe to Fine.
5.5.1	FS-8027	Engine reservation logging has been changed from INFO to FINE level logging.
5.5.1	FS-8086	The "[FabricEngineFileUpdateServer] This update server is suspended..." log message has been changed from WARNING to INFO level.
5.0.1	FS-7017	ArchiveName:ArchiveId is now printed at the finest log level in the Statistics logger for reported archive statistics on the Broker.

## Policy Editor

Closed in Release	Key	Summary
5.5.1	FS-8054	Stack files properties can now be tagged as required such that Skyway Stacks cannot be provisioned until the file has been uploaded.

## Reports

Closed in Release	Key	Summary
5.0.0	FS-5618	The Query page will no longer throw a StackOverflowError with queries exceeding a certain length.

## REST

Closed in Release	Key	Summary
5.6.0	FS-7954	Creating Components through REST with the display name of a feature no longer throws an NPE. The display name and the property name are now both valid.

Closed in Release	Key	Summary
5.6.0	FS-7975	The CLI, REST and custom Ant tasks now provide the ability to start, stop and undeploy archives by specifying deployment criteria. Previously this was done by specifying the Engine ID and instance where the archive was initially deployed. The new CLI methods are <code>deployArchiveByEngine</code> , <code>startArchiveByCriteria</code> , <code>stopArchiveByCriteria</code> , and <code>undeployArchiveByCriteria</code> . The new REST methods are <code>/engines/{daemon-id}/{engine-instance}/archives</code> , <code>/engines/archives/{archive-name}/start</code> , <code>/engines/archives/{archive-name}/stop</code> , and <code>/engines/archives/{archive-name}/undeploy</code> . The new custom Ant tasks are <code>sf:archive-deployment-byengine</code> and <code>sf:archive-deployment-bycriteria</code> that support <code>deploy</code> , <code>start</code> , <code>stop</code> and <code>undeploy</code> actions. The previous task <code>sf:archive-deployment</code> has been deprecated.
5.6.0	FS-8266	A NPE occurred when adding a tracked statistic with the CLI/Ant/REST.
5.5.1	FS-7972	Custom Ant tasks and REST now support editing the manual policy for Stacks. For custom Ant tasks, specify the attribute <code>manualpolicy="true"</code> for the <code>sf:policy</code> task. The service <code>stacks/{stack-name}/manual-policy</code> was added in REST.
5.5.0	FS-6847	Applying a patch to a component via REST now indicates the name of the patch applied in the response.
5.5.0	FS-7242	Components and Enablers were not marked as modified when apply patch changes via REST.
5.5.0	FS-7244	Accounted grid libraries no longer require '-gridlib' in their names when uploading.
5.5.0	FS-7329	Account level users can no longer see grid libraries not in their account in the gridlibs REST service.
5.5.0	FS-7333	Unpublished grid libraries can now be downloaded via REST.
5.5.0	FS-7334	The gridlibs REST service now automatically publishes distributions upon upload.
5.5.0	FS-7428	A request to <code>components?info=blacklisted_names</code> no longer returns a 400 when no Engine Daemons are logged into the Broker.

Closed in Release	Key	Summary
5.5.0	FS-7435	Malformed requests that were throwing an <code>IllegalArgumentException</code> now return a 422 error code instead of a 400 error code.
5.5.0	FS-7440	The wrong error message is no longer displayed when requesting a non-existent configuration file via REST.
5.5.0	FS-7513	The Component type version is no longer ignored when creating a Component via REST.
5.5.0	FS-7588	Using a forward slash in a REST invocation no longer fails due to bad input. For example, querying for the Stack named "N/A" is now valid.
5.5.0	FS-7606	The <code>engineId</code> is no longer rounded off when corresponding to a long numeric value. The correct string representation was always available as a property in the same object.
5.5.0	FS-7698	The grid library REST service now requires <code>COMPONENT_VIEW</code> or <code>ENABLER_VIEW</code> permissions for downloading Components or Enablers.
5.0.1	FS-7024	Template creation now requires property overrides for Component instance counts.



## Schedules

Closed in Release	Key	Summary
5.0.0	FS-6290	The last day of a month falling on a Saturday no longer leads to the Friday before to be treated as part of the last weekend of that month.

## Scripting

Closed in Release	Key	Summary
5.5.1	FS-7970	The scripting methods archiveDeploy and archiveStart are now called with the desired argument list: archiveDeploy(String archiveName, List<ArchiveLocator> archiveLocators, Properties properties) and archiveStart(String archiveName, Properties properties). The previous versions, without the properties argument, will be invoked if the new method signatures are not implemented.
5.5.0	FS-6365	The included Jython scripting grid library was updated to version 2.5.3.
5.0.1	FS-6934	Using Axis2 within a script on the Engine no longer causes class loading exceptions.

## Skyway

Closed in Release	Key	Summary
5.6.0	FS-7765	Additional information can now be specified in the Stack Editor that will be displayed for a running Skyway Stack.
5.6.0	FS-7768	Stack files properties can now be tagged as required such that Skyway Stacks cannot be provisioned until the file has been uploaded.
5.6.0	FS-7767	Stack properties can now be set with a 'Must Supply for Provisioning' flag in order to prohibit Skyway Stack provisioning until specified.
5.6.0	FS-7844	Required global uniqueness of HTTP Routing Prefix properties is now correctly validated.
5.6.0	FS-8133	Clicking the Skyway start button would cause an "undefined" error if "Limit every Skyway user to just one running Stack" was set to "true".

Closed in Release	Key	Summary
5.6.0	FS-7690	The Broker can now limit the number of running Stacks for a user with the configuration property 'Limit Skyway users to one running stack'.
5.6.0	FS-8309	Localization strings were not displayed in all browsers in Skyway.
5.5.1	FS-8057	The Broker can now limit the number of running Stacks for a user with the configuration property 'Limit Skyway users to one running stack'.
5.5.1	SKY-275	Skyway will no longer use the hostname of the request to determine the location of the Broker's REST services. The change requires a new Broker installation or re-installation.
5.5.0	FS-6779	Skyway instantiation failures no longer leave cloned Enablers on the Broker.
5.5.0	FS-7039	Starting and Stopping many Stacks with many different users at once will no longer causes ConcurrentModificationException and date parse exceptions on the Broker.
5.5.0	FS-7674	The Broker configuration setting 'Number of Stack Events in Skyway' did not function.
5.0.1	FS-6950	Skyway could not instantiate a template that has default policy rules referencing a Component in another Stack.
5.0.1	FS-7003	Templates with property overrides created from the Admin API could not be provisioned from Skyway after a Broker restart.
5.0.0 HF-1	FS-6986	The Broker no longer throws a ConcurrentModificationException when trying to provision many Stacks at the same time.
5.0.0 HF-1	FS-6995	Templates with property overrides created from the Admin API could not be provisioned from Skyway after a Broker restart.

## Spotfire Enabler

Closed in Release	Key	Summary
5.6.0	FS-8438	Spotfire groups preloaded with analysis files were not being respected following an Engine Daemon restart from the Silver Fabric Administration Tool due to a Component Instance Numbering issue.
5.5.0	FS-6878	Spotfire Enabler statistics were updated with more appropriate units.
5.5.0	FS-7133	The Spotfire Enabler now sets the variable INCOMPATIBLE_CONTAINERS to ensure it starts up in a clean environment.
5.5.0	FS-7357	Spotfire web players are now configured with a unique asp.net session cookie for each server instance.
5.5.0	FS-7512	Kerberos authentication is not supported and all references have been removed.
5.0.2	FS-7044	Support for TIBCO Spotfire 5.
5.0.2	FS-7358	Users no longer need to re-authenticate when accessing multiple web players. Each web player instance is now configured with a unique asp.net session cookie.
5.0.1	FS-7205	The PRELOAD_LIST variable used to load analysis files now uses parentheses-delimited groups of comma-delimited lists, with groups being tied to Component instances.
5.0.1	FS-6873	The 'URL pattern' page was not functional.
5.0.1	FS-6959	Running only one instance of the Spotfire web player per host is now enforced in the Enabler during Component activation.
5.0.1	FS-7015	The statistics were renamed to eliminate a problem when reloading the Enabler with changes.
5.0.1	FS-7046	win32library.dll could not be found when using IMPERSONATION variables.
5.0.1	FS-7131	The Spotfire Web Player no longer uses the distribution version as the component type version. It is now set to 1.0.
5.0.1	FS-7193	ApplicationHost.config merge no longer results in an invalid configuration.

Closed in Release	Key	Summary
5.0.1	FS-7222	ASP.NET view state wasn't validated if created on one web player and then read on another.
5.0.1	FS-7223	The default security scheme is now anonymous.
5.0.1	FS-7224	Credentials are no longer stored in plain text within the web.config.
5.0.1	FS-7247	The <code>SFWP_Install.log</code> was not viewable from Admin UI upon activation.
5.0.0 HF-1	FS-6882	The Spotfire Enabler no longer restarts every few hours due to a Windows memory leak.

## Stack Editor

Closed in Release	Key	Summary
5.6.0	FS-7976	The Stack Builder wizard Files tab would allow multiple entries with the same Component and same Relative Path. Validation now prevents this.
5.5.1	FS-8055	Stack properties can now be set with a 'Must Supply for Provisioning' flag in order to prohibit Skyway Stack provisioning until specified.
5.5.1	FS-8056	Additional information can now be specified in the Stack Editor that will be displayed for a running Skyway Stack.
5.5.0	FS-7336	The URL tag of the Stack editor is now parsing the Component and account.
5.5.0	FS-7619	Setting the "min" or "max" validation on a Stack template property to 0 no longer fails.
5.5.0	FS-7676	Removing a Component from a Stack no longer leaves Component specific properties in the Stack.
5.5.0	FS-7692	The warning dialog in the Stack Builder is no longer missing the '+' character.
5.5.0	FS-7702	The Stack builder no longer displays an error when the context URL is '/'.

## Stacks

Closed in Release	Key	Summary
5.5.1	FS-8023	Stack override validations were not persisted across Broker restarts.
5.5.1	FS-8053	Editing Skyway specific Stack properties such as icon, owner, technology, URLs, and Properties did not mark the Stack as changed. Stacks cannot be published if they are not marked as changed.
5.0.0 HF-1	FS-6891	Archive scaling rules are now properly copied when cloning a Stack or instantiating a Skyway template.

## Statistics Management

Closed in Release	Key	Summary
5.0.0	FS-6140	An exception thrown from AbstractStatisticsProvider.getStatistic() no longer aborts the collection for the rest of the tracked statistics in the interval.

## Tomcat

Closed in Release	Key	Summary
5.6.0	FS-7901	Documentation was added on how to run a Tomcat Component as a specified user.
5.5.1	FS-7989	The Tomcat Enabler no longer throws an NPE when there are no archives to detect.
5.5.1	FS-8131	The Tomcat 6.0 Enabler version was updated to 5.5.1. To use the new Enabler, the change Enabler action must be performed on the given Component.
5.5.0	FS-7629	The ROOT_CONTEXT_WEBAPP variable description now indicates that the extension is required.
5.0.1	FS-6801	The Apache Tomcat distribution was updated to version 6.0.35.
5.0.1	FS-6864	Archive detection was added to Tomcat.
5.0.0	FS-5117	Some VirtualRouter threads were not cleaned up properly during shutdown when running on the Tomcat 5.5 Enabler.
5.0.0	FS-5871	Tomcat Enablers no longer have port conflicts running on hosts with 16 or more instances.
5.0.0	FS-6299	Tomcat no longer attempts to lookup HTTPS statistics when SSL is not enabled.
5.0.0	FS-6755	Variable SERVER_NAME was removed since it is no longer used.

## Upgrade

Closed in Release	Key	Summary
5.6.0	FS-7888	After patching a Silver Fabric 5.5 installation that had actively running Engines, the manual upgrade Engine Daemon action did not restart Engines.
5.6.0	FS-8199	When upgrading Brokers, global archive scaling rules were lost. They are now retained.
5.6.0	FS-8203	Engines properties are now merged into the new Broker during upgrade.
5.5.0	FS-6940	Changes to the built-in roles are no longer dropped when upgrading the Broker.
5.5.0	FS-7626	Manual Engine upgrade mode was not enabled after patch installation.
5.5.0	FS-7703	The hot fix installer now verifies that it is being applied to the correct service pack.

## WebLogic

Closed in Release	Key	Summary
5.6.0	FS-8187	Archive deployment caused an exception for WebLogic 12.1.1 when a distribution Grid Library was created as documented. The documentation has been changed to provide an updated grid-library.xml to correct this issue.
5.5.1	FS-7904	WebLogic SSL login timeout can now be optionally set in the runtime context variable SSL_TIMEOUT.
5.5.1	FS-7951	The Archive Management feature property, 'Start Archives on Activation', will no longer fail on WebLogic 10.3.1.
5.5.1	FS-7953	Generated startup and shutdown scripts are now excluded from a captured Component.
5.5.0	FS-7577	The WebLogic Enabler no longer assumes that the Application name and the Archive name are the same when deployed through the console.

Closed in Release	Key	Summary
5.0.1	FS-6866	Archive detection and scaling was added to managed WebLogic server instances.
5.0.0	FS-4621	Activation no longer fails when using SSL on slow Solaris Engines.
5.0.0	FS-6004	New Container for Oracle WebLogic 10.3.5 (11gR1) Application Server.
5.0.0	FS-6070	Components not captured on Engine instance zero could not run on instance zero.
5.0.0	FS-6084	The variable STANDALONE_ADMIN_PORT_ENABLED now properly enables the administration port when set to true.

## WebSphere

Closed in Release	Key	Summary
5.6.0	FS-7987	WebSphere archive statistics are no longer reported with the ID in the name, which prevented them from being displayed on the Administration Tool dashboard.
5.6.0	FS-8183	Documentation was added explaining that WAS_PARENT_WORK_DIR and WAS_LOCK_DIR need to be set when running multiple DMs from the same Engine.
5.6.0	FS-8316	Windows batch startup scripts now use JAVA_OPTS.
5.5.1	FS-7906	WebSphere Deployment Manager Enablers will now automatically set up global security on the Deployment Manager based on a set of new context variables: APP_SECURITY_ENABLED, JAVA2_SECURITY_ENABLED, ACTIVE_AUTH_MECHANISM, ACTIVE_USER_REGISTRY, CUPRIMARY_ID, CUSERVER_ID, CUSERVER_PASSWORD, CUSERVER_CLASS, KEY_STORE_NAME, and TRUST_STORE_NAME.
5.5.1	FS-7986	Throughput and response time statistics are now properly reported from the WebSphere Enabler.
5.5.1	FS-7996	WebSphere archive statistics are no longer reported with the Id in the name keeping them from being displayed on the UI dashboard.



Closed in Release	Key	Summary
5.5.0	FS-7000	WebSphere Enabler's work directory is now properly deleted after the last WAS instance is shutdown on the Engine host.
5.5.0	FS-7659	The archive installation directory is now converted to forward slashes on Windows so paths don't inadvertently escape characters when evaluated.
5.0.2	FS-7190	The IBM AIX operating system is now supported by the WebSphere Enabler.
5.0.0	FS-6006	New Container for IBM WebSphere 8.0 Application Server.
5.0.0	FS-6062	The variable DELETE_RUNTIME_DIR_ON_SHUTDOWN is no longer ignored.
5.0.0	FS-6063	The Deployment Manager Container now installs the configured archives.
5.0.0	FS-6285	WebSphere Enabler no longer fails to activate on Engines installed in 'C:\Program Files'.

## Known Issues

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The table in this section lists known issues in this release.

### Ant Tasks

Key	Summary/Workaround
FS-8571	<b>Summary:</b> "java.lang.NoSuchFieldError: INSTANCE" is thrown when running a Silver Fabric Ant task. This is due to conflicting HTTP Client jars in the CLASSPATH. <b>Workaround:</b> None

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### Broker

Key	Summary/Workaround
FS-1240	<b>Summary:</b> When uploading a new config file in the Enabler wizard, files can be created with file paths that are longer than Windows allows. When this happens, the file can't be successfully deleted by the Broker and must be manually deleted. <b>Workaround:</b> None
FS-8558	<b>Summary:</b> "java.lang.IllegalArgumentException: File C:\Program%20Files\<...>\jspwiki.policy does not exist, or the SecurityManager prohibited access to it." is thrown on the Engine when installed on a path with a space on Windows. <b>Workaround:</b> None

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### Documentation

Key	Summary/Workaround
FS-8509	<b>Summary:</b> The copyright symbol displays as '??' in the Firefox browser title or the PDF guides. <b>Workaround:</b> None

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## JBoss

Key	Summary/Workaround
FS-8507	<p><b>Summary:</b> "Failed to register LogConfigMXBean javax.management.NotCompliantMBeanException" is thrown when running VirtualRouter on JBoss 5.1. This is purely cosmetic.</p> <p><b>Workaround:</b> None</p>
FS-8548	<p><b>Summary:</b> "[AbstractKernelController] Broken callback: ClassSingleCallbackItem..." is logged when running JBoss 6.1 Enabler and JDK 1.7.</p> <p><b>Workaround:</b> Add the following block to the configure.xml of the Enabler or Component to fix the warning:</p> <pre data-bbox="392 621 1316 1281"> &lt;configFiles baseDir="\${JBOSS_SERVER_HOME_DIR}/deployers/jbossws.deployer/META-INF" include="stack-agnostic-jboss-beans.xml"&gt;   &lt;xpath expression="/deployment/bean[@name='WSDescriptorDeployer']/incallback[@method='setProcessor']" action="Remove Node"/&gt;   &lt;xpath expression="/deployment/bean[@name='WSDescriptorDeployer']" action="Add Node"&gt;   &lt;![CDATA[   &lt;property name="processor"&gt;&lt;inject bean="WSDescriptorProcessor"/&gt;&lt;/property&gt;   &lt;/xpath&gt;   &lt;xpath expression="/deployment/bean[@name='JMSDescriptorDeployer']/incallback[@method='setProcessor']" action="Remove Node"/&gt;   &lt;xpath expression="/deployment/bean[@name='JMSDescriptorDeployer']" action="Add Node"&gt;   &lt;![CDATA[   &lt;property name="processor"&gt;&lt;inject bean="CXFJMSDescriptorProcessor"/&gt;&lt;/property&gt;   &lt;/xpath&gt;   &lt;/configFiles&gt; </pre>

## WebLogic

Key	Summary/Workaround
FS-8466	<p><b>Summary:</b> WebLogic will not start on SuSE Linux with ipv6 enabled. The workaround is to add <code>-Djava.net.preferIPv4Stack=true</code> in the startup script.</p> <p><b>Workaround:</b> Add a non-xml dummy file (<code>datasynapse\webapps\livecluster\deploy\resources\shared\hook\temp.txt</code>) to the hook directory to force synchronization of these shared resources.</p>

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