



# Atlas Planning and Tracking Suite 5.0.1

Release Notes

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# Components

This version of the Atlas Planning and Tracking Suite is comprised of the of following products/versions:

- Atlas 5.0.1** Atlas is a web-based, lightweight Requirements tool focused on enabling business analysts, product managers, and other Project stakeholders to:
- Easily gather and collaborate their ideas using their favorite media (diagrams, work-flows, pictures, presentations, documents, videos).
  - Organize and structure those ideas into well formed requirements.
  - Prioritize and plan those requirements into a specific time-frame given their agile teams velocity.
  - Track the progress of their agile teams work towards their requirements, independently of their agile tool of choice.
- Rhythm 5.0.1** Rhythm is an agile project planning and tracking platform designed to allow you to:
- Gather, prioritize, and manage backlog stories.
  - Get comprehensive visibility of all your agile assets.
  - Promote effective agile planning and execution.
  - Easily track release changes and progress.
  - Manage Code Reviews directly from within Rhythm in alignment with your agile process.
  - Receive full visibility across the software delivery life-cycle.
  - Use Scrum or Kanban agile methodologies.
  - Integrate with other issue tracking and requirements management tools.
- Micro Focus Connect 3.0.1** A web application that allows you to synchronize assets from third party tools into the Atlas Hub (and thereby, into Atlas and Rhythm).
- Atlas Hub 16.2** A software change and configuration management server that stores and versions your assets.

# What's New

The following section contains the major new features for this release.



**Tip:** Please refer to the individual product release notes for more information about new features provided since the last full release.

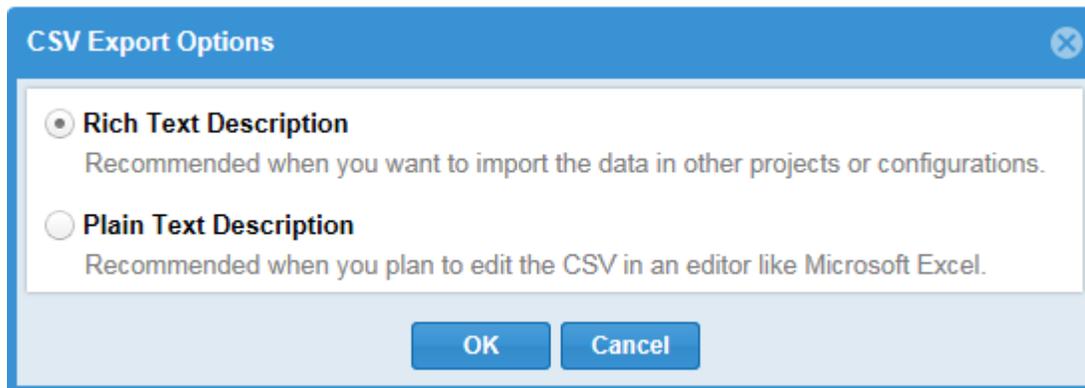
## What's New in Atlas

### 5.0.1

The following are the latest features for Atlas:

#### CSV Export Options

Atlas now allows you to choose how you want export your CSV **Description** Text in the **Requirements Grid** and tree.



#### Log File Location

The log files for Atlas and Rhythm are stored in the following location:

```
C:\ProgramData\Micro Focus\Atlas
```

You can specify a different location in the `ALMConfiguration.xml` file by entering the following inside the `<configuration>` element:

```
<atlaslog>  
  <dir>C:\path\to\logs</dir>  
</atlaslog>
```



**Note:** This applies to all supported operating systems.

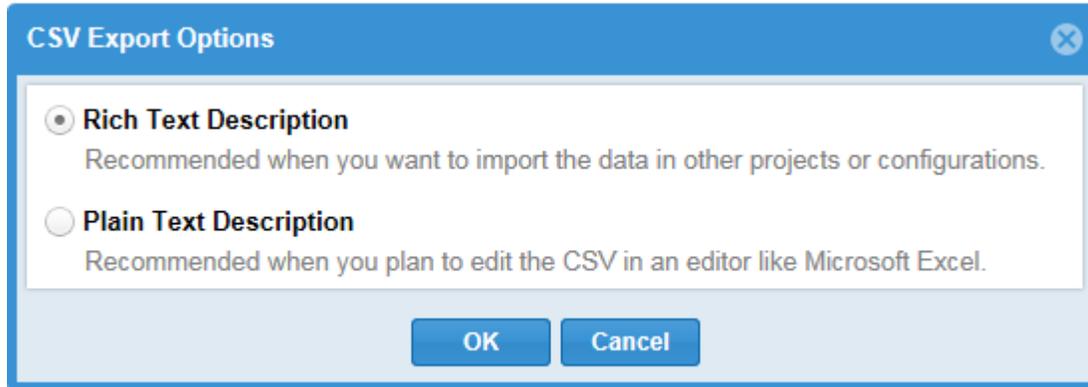
## What's New in Rhythm

## 5.0.1

The following are the latest features for Rhythm.

### CSV Export Options

Rhythm now allows you to choose how you want export your CSV **Description** Text in the **Breakdown** view.



### Code Review for Dimensions CM

Rhythm now supports Dimensions CM as an SCM system allowing you to associate Stories/Tasks to your commits so that you can use Rhythm's Code Review with Dimensions CM.

#### Creating a Dimensions CM SCM Configuration

Rhythm is configured to use StarTeam as its SCM tool by default. To use another:

1. Click  **Home**.
2. Click **Admin Tools**.
3. Click **SCM Configuration**.
4. Click  **New**. A new entry is added to the **SCM Configuration** list.
5. In the **Repository** group:
  - a) Select `Dimensions CM` from the **Type** field.
  - b) Give the configuration a **Name**.
  - c) In the **URL** field, enter a Dimensions CM URL in the form of:

```
<host>/<db name>@<connection name>
```
6. In the **Projects/Streams to Monitor** group, click  **New** to add a new row for each Project or Stream to monitor. If none are added, all are included.
  - a) In the **Pattern** field, use the `*` or a regular expression to include Projects/Streams.
  - b) In the **Action** field, select `Include` or `Exclude`.
7. In the **Authentication** group, you only have the **Basic** option. Enter the **Username** and **Password**.
8. In the **Commit Association** group, read the information in that section to learn how to associate your commits with Stories and Tasks.
9. Click **Save**.

## What's New in Micro Focus Connect

## 3.0

The following are new features for this release of Micro Focus Connect.

### Redesigned User Interface

The Micro Focus Connect user interface has been redesigned for a modern look and feel. One example of the redesign is that the action icons are now contained within a single Action menu. This cleans up the user interface making it easier to view and navigate.

### Enhanced Synch Criteria

The Synch Criteria dialog has been enhanced to allow more refined and detailed mapping.

### Auto-Mapping

It is now possible to automatically map a connection's types and fields with the new Auto-Map feature. If auto type mapping, all types defined by the selected data sources will be mapped. Fields are auto-mapped for each type that is exposed by the data source.

### High Watermarks

High Watermarks allow Micro Focus Connect to know what has previously been synchronized. It acts as a time and place marker so that Micro Focus Connect compares what has been updated, added, deleted, and etc. after the High Watermark was made.

### Import and Export

Use import and export to move data sources, synchronizations, and user maps between installations.

### Refresh Server Data

The Refresh Server Data option clears out cached data that has been obtained from connectors.

Micro Focus Connect caches data to improve performance.

Data that is cached:

- Property enumerations
- Property lists
- Type property lists
- Type lists
- Project lists

### Charts

The new charts track volume, changes, and errors. Mouse over the data points to view detailed data.

### Attachments

Micro Focus Connect now supports `FIELD_TYPE_ATTACHMENT`.

Any item that Micro Focus Connect supports (e.g. Rally story, Hub Requirement) can contain one or more fields of type `FIELD_TYPE_ATTACHMENT`.

Connectors that support attachments must be able to convert their representation of attachments into the "Connect" representation of attachments which is defined by the interface `IAttachments`. Therefore, when Micro Focus Connect invokes `connector.getValue("attachmentFieldName")`, the connector must return an object that implements the `IAttachments` interface.

Similarly, when Micro Focus Connect invokes `connector.setValue("attachmentFieldName", value)`, the connector knows the value implements the `IAttachments` interface.

Currently, only the Atlas Hub and Rally support attachments.

## Folders

Micro Focus Connect now supports Folders with the StarTeam connector.

## Object Relationships

Story, Task, Epic, Release, Iteration, and etc., can have relationships to other items. For example:

- Task has a field named **parentStory** that refers to a story
- Iteration has a field named **assignedRelease** that refers to a release

Some repositories implement item relationships directly with item fields. For example, Rally hierarchical requirements have a field named `iteration`. The value of that field is an identifier of a specific iteration object.

Other repositories use independent links/traces to implement relationships. For example, StarTeam Trace objects identify a source item and a target item which represents a single item relationship.

In earlier versions of Micro Focus Connect, these relationships were defined in the Connection objects and the definitions were StarTeamAtlas Hub-centric, following the paradigm of the Atlas Hub for implementing item relationships.

In this release, the relationships between items are defined in general terms in the data source relationship model. Even repositories that implement relationships as links/traces, expose the relationships to Micro Focus Connect as if they are "direct field" relationships. Therefore, each data source defines how the contained items are related.

Additionally, each connector provides a default relationship model that administrators typically use.

# What's New in Atlas Hub

## 16.2

The following are the new features in this release.

### Atlas Hub

The following are the new features for this release of the Atlas Hub.

#### Offline Proxy Utility

Use the new Offline Proxy utility to communicate to StarTeam users that the server is down for maintenance. Previously, when StarTeam Server is down due to database issues or maintenance, a user connecting with StarTeam SDK or StarTeam Cross-Platform Client gets a message stating, "Unable to connect to server." Since they do not know what the reason is, they might raise issues with their IT department. When using the Offline Proxy utility, administrators can better communicate the reason for the disruption in the Server, avoiding unnecessary IT service tickets.

#### Server Message Notification

The new Server Message Notification alerts users when logging in or when the StarTeam Offline Proxy is running. Configure the message from the Server Administration Tool Configuration.

## **Server Hooks**

Server hooks are scripts that run automatically every time a particular event occurs in the Atlas Hub repository. Server hooks allow the user to trigger customizable actions at key points in the development life cycle. For more information, refer to the "Server Hooks" topic in the *Server Administration Help*.

## **Custom Component Builder Enhancements**

StarTeam ServerAtlas Hub now provides the ability to add Primary Descriptors and Secondary Descriptors using Custom Component Builder.

## **Support for Oracle Database Character Set AL32UTF8**

Atlas Hub now supports Oracle database character set AL32UTF8.

## **Support for Oracle Database 12c Container Databases**

Atlas Hub now supports Oracle Database 12c container databases.

## **Support for Oracle 12c version 12.2**

Atlas Hub now supports Oracle 12c version 12.2.

## **Support for SQL Server 2016**

Atlas Hub now supports SQL Server 2016.

## **Support for Microsoft Windows Server 2016**

Atlas Hub now supports Microsoft Windows Server 2016.

## **Support for PostgreSQL 9.6**

Atlas Hub now supports PostgreSQL 9.6.

## **De-support of Object Caching on Server**

Object Caching is de-supported on the server. StarTeam Server will ignore `ObjectTypes` `Setting` setting defined in `CacheAgentConfig.xml` file for all cache agents which include root and remote cache agents.

# Fixes

The following section contains the fixes for this release.

## Hot Fixes in Atlas

### 5.0.1

The following fixes and general improvements were made for this release:

<b>Hub Version Verification</b>	Verification of the minimum required version of the Atlas Hub supported at server startup.
<b>1113261</b>	Resolve application hang when too many browser tabs are open.
<b>1113012</b>	Description field in CSV Export can be <code>Plain Text</code> .
<b>1110797</b>	Search defaults to <code>&lt;current project&gt;</code> .
<b>14781</b>	Improved display while uploading attachments.
<b>14780</b>	Improved responsiveness in rapid creation of Requirements in <b>Define</b> .

### 5.0

The following fixes were made for this release:

#### **1112166: Making a Project Public**

Resolved a permissions issue switching between public and private projects.

#### **1109158: Story ID in Rhythm offset by 1 from StarTeam Cross-Platform Client**

Adjusted the Rhythm **ObjectID** used to match the default **ID** used in the StarTeam Cross-Platform Client.

#### **1112631: Setting ALMServiceUrl in Atlas Hub config with scheme breaks goto links**

Atlas/Rhythm adjusted to detect Apache Tomcat configuration and automatically apply protocol to generated URLs.

#### **Compare Dialog now includes changes in relationships**

Atlas/Rhythm provide ability to view relationships (manual and system) when viewing version differences.

#### **Provide ability to update files attached to requirements and stories**

Atlas/Rhythm provide the ability to update attached files (without delete and re-add).

#### **Provide ability to create a new Story from Atlas Concept**

Atlas now allows for generation of Stories using Concept contents directly from the **Gather** perspective.

#### **Allow for copy/paste special of requirements without automatic plan assignment**

Plan release and Plan traces have been excluded from copy/paste actions.

## Provide ability to maximize text editor to fill full browser window

Rich description editor has been updated to include a maximize button.

## 4.3

The following fixes were made for this release:

- Administration**
  - AD4102: Show scrollbar on user list.
- Define**
  - AD3483: Changed window width of **Requirement** panel.
  - DE15707: Out of date message added to **Requirement** grid.
  - DE15707: **Requirement** grid locking failure for single row selected.
  - DE15874: Reload requirement details in tree view.
  - DE16009: Requirement editor toolbar loads twice.
  - DE16044: Requirement report always selected.
  - DE16065: Existing Relationships in the **Relationships** tab are not showing duplicate traces of a different trace type.
- Filters**
  - DE15684: As a viewer, after clearing a filter, filter icon changes to blue.
- Gather**
  - DE3915: Fix moving Concepts when whiteboard list is filtered
- General**
  - DE12341: Reconnect REST server to StarTeam Server after connection loss.
- Relationships**
  - DE16083: Remove relationship not working (Make proxy consistently get from ID rather than ID Property).
  - DE3921: Fix relationship to new story being inconsistent.
- Reports**
  - DE16040: Handle multi-byte label names in reports.
  - DE16040: Handle non-ASCII labels in reports.
  - DE16067: Compare Report not generated for first label in configuration.
- Server**
  - DE12341: Clear up messages when rest disconnected from StarTeam.

## 4.2

The following fixes were made for this release:

- Administration & Projects**
  - DE15488: Admin User (with Admin Role) cannot see **Admin Tools**.
  - DE15368: Wrong role message in case you have access rights only to Rhythm and select Atlas perspective.
  - DE15264: Role permissions don't update until browser is refreshed.
  - DE15292: Changes to permissions causes exception.
  - DE15293: Change project to private when last admin is removed.
  - DE15318: Restrict projects from Rhythm-only users.
  - DE15324: Keep project when changing applications.
  - DE15395: Removing the last Administrator from the restricted project does not function correctly.
  - DE15439: Lock Manager uses Lock Break Permission.
- Define**
  - DE15656: Remember the sub-view selected.

- DE15610: Make tree re-size splitter allow wider tree.
- DE15271: Relationship diagram shows additional item box.
- DE15314: Story name containing special characters is not displayed correctly in **Relationship Type & Direction** dialog.
- DE15432: Fix issue with multi edit not working consistently in requirement grid.
- DE15545: Grid renders check boxes before data is ready.
- DE15492: Grid-view: Delete warning is incorrect.
- DE15635: Prevent double load of tree view when grid view is filtered.

#### Diagram

- DE13126: Generating previews of remote images fails.
- DE15568: Fix saving new empty diagram.
- DE15464: Grid-View: Change requirement type to Diagram gives no warning.

#### Miscellaneous

- DE15552: Gather: On first use, creating new tag has issues.
- DE15597: Quick Print: Print Requirements from Tree Dialog should ask for Save Changes if current requirement is in edit mode.
- DE13218: Manage Labels - no feedback on Save.
- DE15608: Tidy up **Generate Report** dialog.
- DE15313: Search Project selector is not displayed in StarTeam Cross-Platform Client Search perspective on low screen resolution.
- DE20721: Make Remove Parent button disabled for non-child stories
- DE15320: Fix remove tag for Requirements.
- DE15329: Quick-Look: Concept of type link is shown as a file to download in quick look Concept.
- DE15291: Apply fix for Requirement tree loading expanded again.
- DE15291: Turn off tree reloading due to third-party defects.
- DE15360: Gantt does not present tool tip on due date flags that were delivered late.
- DE15370: Fix perspective is restricted formatting.
- DE15432: Fix issue where multi-select UDA previously set values are displayed as set in the consequent edits.
- DE15432: Fix issue with status not being the correct column for requirement grid.
- DE15490: Plan: Opening Requirements from plan removes Owner field.

#### Relationships

- DE15510: Fix count on adding multiple relationships.
- DE15528: Relationships Diagram: Owner for Requirements appears as Not Assigned in list.
- DE15580: Fix File Name not showing on Adding relationship.
- DE15882: Remove ability to manually create relationships to change packages.

#### Time Machine

- DE15337: Enable reports in Time Machine.
- DE15341: Fixes Time Machine on Home perspective.

#### Track

- DE15412: Requirement types missing Planning/Delivery flag in Detail view until Browser is refreshed.
- DE15623: Rank for Requirements is N/A.
- DE15626: Remove duplicate messages for requirements with un-estimated stories.
- DE15626: Clean-up tracking issue messages.

## 4.1

The following fixes were made for this release:

### Browser-Related

- Ensure that focus on a Description field worked consistently in Internet Explorer 10.
- Resolve Internet Explorer-specific issue where search UI stops working until refresh after creating a Concept.
- Tag groups in Gather do not always load in Firefox.
- Ensure that logged-in users browser refreshes after a successful version upgrade.
- Resolve UI issues on some browsers related to editing profiles.

### Date/Time

- Time machine had a UI time display mismatch.
- Ensure invalid dates can't be selected in the Activity date picker.
- Define: Application responds incorrectly if the currently selected requirement does not exist at a previous date/time selected in time-machine
- Resolve issues in Time Machine when attempting to view a Requirement that wasn't available at a specific historic label/time.

### Filters

- Create new filter without save and select another with confirmation to save changes makes the new filter un-selectable.
- Viewers don't see Filter icon on load of any perspective, but it appears after quick filters use.
- Fix proxies on stores/models to resolve filter persistence.
- Strip Project ID from project-specific filters in reports.
- Plan review report filter combobox width fix.
- Whiteboard not informing whether filter is applied.

### General

- Fix drag drop issue where dropped item is not in correct location.
- Initial start-up performance improvements.
- Create Requirement from Note Concept does not save Description.
- Quick Look for Discussions opens item Quick Look without expanding the Discussions tab.
- Push to Backlog fails with Delivery Project set to same Project as Plan.
- Handle multiple edge cases related to the deleting of tags while other users are using them.
- Resolve multiple selection issues with the define perspective's tree picker.

### Relationships

- Make Relationships read only in Quick Look.
- Defer option is enabled for deferred Relationships.
- Time machine: Cross project break down Relationship between Requirements can cause tracking information to fail to load in Time Machine mode.

### Tracking

- Gantt UI breaks when name contains HTML special characters.
- After deleting a label from Tracking label, list is not refreshed.

### User/Access Rights

- Warn admin users when Backlog root Story is in a Sprint.
- Fix user role alignment on lower resolutions.
- Resolve issues with access rights to Gather and Define perspectives for viewers after the upgrades to access rights were implemented.
- Editing user properties from Main toolbar, click Save not ending the save process.

## 4.0

The following fixes were made for this release:

- Ensure Topics that belong to deleted items are still displayed in activity.
- Remove infinite loading mask when displaying reply to deleted item.
- Merge Projects stores into a single store.
- Correct Tag Indicators.
- Ensure restore Child item from recycle bin functions correctly.
- Ensure items locks are released more readily.
- Introduce Session Timeout Support.
- Correct Integration Chart Date.
- Ensure Target -Attribute is retained in Rich Text.
- Remove redundant read of plan from cache.
- Correct character set processing for import from CSV.
- Show all requirement relationships on concept badges.
- Allow push to backlog with trace but no story.

## 3.2.1

The following fixes were made for this release:

- Adding tag during edit session no longer removes user data
- Cookie now contains the "secure" attribute
- X-Frame-Options header is set and does not allow Framable Page Clickjacking
- Cookie contains the "HTTPOnly" Attribute, ensuring it stays secure

## 3.2

The following fixes were made for this release:

- More components have tooltips.
- Loading spinners add to gather concept renderers.
- Whiteboard filter improvements.
- Date formats are now consistent across application.
- History panel can be refreshed correctly.
- URL for concept URLs is now visible.
- Dates are used to calculate difference between milestones.
- Relationship panel updated on all changes to reflect new items.
- Filter improvements for editing and storing new filters.
- Improved discussion tab stays closed and shows full list of project users.
- Internet explorer 10 can now be used to import requirements
- Requirement Editor saves correctly when saved a second time.
- Reports now correctly include Requirement Description.
- Multi-select UDA panel can be reset after cancel.
- Search is now fully functional on all browsers.

## 3.1

The following fixes were made for this release:

- Performance Improvements for Application Start-up.

- Performance Improvements for Activity perspective.
- Security improvements for unauthorised operations.
- Security improved to restrict download of resources to registered users only.
- Project role reported correctly in Home perspective.
- Newly created projects are correctly added to favourite projects.
- UDA max length implemented.
- Duplicate UDA names handled - they are now rejected and reported to the user.
- Improved performance for report generation.
- PDF file concepts now shown in line for all browsers.
- Performance improvement for Define perspective.
- Extended requirement sorting to include UDA values.
- All requirement properties are sortable in the correct order in requirement grid.
- Improved UI for disabled requirement type.
- Requirement attribute updates propagated to all UI components.
- Requirement editor retains edit after attachment is added.
- Improved relationships dialog ensures all relationships are visible.
- Sorting of attachments is enabled.
- Discussions correctly include mentioned users.
- Discussion replies are now included in report.
- Tracking Perspective rendered correctly when maximized or collapsed.
- Plan edits are retained if requirement is added.
- Plan items sort order is persisted.
- Search goto and quick-look handle deleted items.
- Case sensitivity extended to filters.
- Viewer role has been restricted from creating filters.

## 3.0

The following fixes were made for this release:

- Update UI to support special/international characters. For example: ä, ö, ü.
- UDA usage fixes.
- Tracking Gantt schedule rendering for view only users.
- User mentions in Discussion reworked.
- Ability to reset project permissions to initial state.
- Tree navigation and drag/drop improvements.
- Redesign of plan and plan review dialog.
- Security improvement of DOM injection protection.
- CSV import support for Unicode characters.
- New rich text editor.
- Performance improvements: UI and item loading.
- Performance improvements: Time Machine general usage.
- Performance improvements: List available related items.
- UDA creation and management updates.
- User management dialog updated.

## Hot Fixes in Atlas Hub

## 16.2 HF1

The following fixes/updates were made for this release.

### SDK

- 12,433** Prevent a potential `ArrayIndexOutOfBoundsException` that could occur when creating a `TreeItem`.
- 12,456** Prevent a potential `NullPointerException` caused by setting a `Trace Type` to `NULL`.
- 12,458** Display `File Content` changes through the `Rhythm/Cosmo` bridge when viewing cross view `Change Package` file content.
- 12,460** Prevent a security access exception thrown by the server if a non-administrative user creates a trace.

## 16.2

The following fixes/updates were made for this release.

### Hub

- 69,861** Added support for `Active Directory 2012 R2`.
- 69,973** Fixed a bug in `MPX SmartSockets` implementation where some messages are ignored by `RemoteCacheAgent`.
- 69,955** Fixed a bug in `Configure Search` option where in attempting to exclude projects and views from search fails with an error when the search configuration is missing (for old configurations).
- 69,989** Server now sends `MPX` events for individual delete operations for all item types except folders.
- 70,009** Fixed an issue where the stored password of an `SMTP` certificate is removed if any changes are made to the configuration details.
- 70,029** `VersionMetadataEx` is missing server name and port.
- 70,037** Improved debug logging for cache agents.
- 70,046** Added `https` support for `ALMServiceURL`. This enables `Atlas REST` notifications going to `https` URLs.
- 70,052** Fixed a bug in `Version Metadata` when a deleted item is shared back without deleting the trace.
- 70,053** Fixed a **Server Administration User Manager** sorting issue the configuration details.
- 70,057** Fixed a bug in `VersionMetadataEx` to use the `name` field instead of `description`.
- 70,061** Fixed an Issue with access rights of trace endpoints (<http://pivotalrpi/rpi.asp?w=1&r=1112543>).
- 70,065** Fixed flags for `Content` property in `Concept` component.
- 70,067** Added the functionality to allow the `RemoteCA` to access a copy of the vault if available.
- 69,837** Fixed memory leak issue which occurs while checking in files. Happens only for `ActiveMQ MPX`.

### SDK

- 12,198** SDK no longer throws a runtime exception when deleting a grand child tree item.

- 12,200** SDK no longer throws an `Index out of Bounds` exception when saving artifacts in a transaction.
- 12,202** SDK now supports `Version Metadata` properties for configured Rhythm Types and operations.
- 12,203** SDK provides a `LogManager` for rich logging integration into a Log4J-compliant client application.
- 12,207** SDK now provides a bookmarks implementation in the Rhythm/Web Cache object model.
- 12,210** SDK no longer causes the server to throw a `Record Not Found` exception when a Sprint/Story/Trace is new.
- 12,211** SDK no longer throws an exception if Rhythm attempts to cache the data of a deleted Project.
- 12,224** SDK now refreshes all open Recycle Bins during automatic cache refreshes of the Web Cache object model.
- 12,231** SDK exposes a Review component to Rhythm.
- 12,233** SDK now correctly handles exceptions in a `Pulse ChangePackage` commit.
- 12,238** SDK now optimizes calls to find users in order to eliminate creation and deletion of millions of groups in memory.
- 12,267** SDK introduced new APIs that support Trace *versioning*.
- 12,269** SDK now throws an exception if a *versionable endpoint* is locked by a different User when committing a *versioning* change.
- 12,272** SDK general optimizations of the `ArtifactCache` as well as cross-View caching synchronization.
- 12,277** SDK now caches history queries through the `ArtifactCache`.
- 12,297** SDK now supports cross-View Process Item for check-in through the `ArtifactCache`.
- 12,301** SDK now correctly returns Link Values for Traces created in newly created child Views in a Web Cache connection pooled session.
- 12,305** SDK now exposes `MPXTypedResource` lightweight events, issued through the Web Cache object model.
- 12,308** SDK implements `ScmChangeAtom` interfaces for Pulse and Rhythm.
- 12,318** SDK now supports republishing Process Item to Change Package relationship changes in Pulse and Rhythm.
- 12,333** SDK optimizations of `ArtifactCache` tree item API's `isLeaf` and `hasChildren`.
- 12,347** SDK ensures that URI identifiers are consistent across StarTeam, Pulse, and Rhythm.
- 12,351** SDK provides an `Identifiable` interface for all types with an `Integer Identifier` property.
- 12,378** `ArtifactCacheManager.Context` now exposes new API's to resolve artifacts.
- 12,388** SDK general optimizations of `TraceIndexes` for Rhythm.
- 12,408** SDK now supports `Deleted Item` events from StarTeam Server for Rhythm.
- 12,420** SDK checks `Content Properties` for equality when marking an artifact as clean/dirty.

## 16.1 HF1

The following fixes/updates were made for this release:

## Hub

- CR 69,681** Added `General` property to `Story` component: `text`, 128 length.
- CR 69,680** `Requirement` component should be loaded for StarTeam Enterprise license.
- CR 69,658** Fix build/install scripts for new `Kanban` and `Swimlane` components.
- CR 69,642** Added `Kanban` and `Swimlane` components. Also added the `TraceType` enumeration: `Containment` and `Flow`.
- CR 69,621** Improve logging for connection exceptions for `Rhythm`.
- CR 69,603** Add `Story` as a supported `Process Item` type for version 16.2.
- CR 69,579** Adding `ChangePackage` change objects with source and target endpoints as external links instead of `StarTeam` items does not work while querying back the `changereference`.
- CR 69,573** After upgrade from 13.0 to 16.0, the `ConfigLabel Flags` property in `CTABLES` did not get updated correctly. As a result, attaching a file to a label fails with an `Access Violation Occurred` on Oracle databases.
- CR 69,496** In the **User Manager** dialog box of the Server Administration Tool, additional licenses are shown that are not shown in server log. It also allows users to login using these licenses. This happens when upgrading Hub installation form 15.x to 16.x. This issue exists in StarTeam Server builds 16.x release
- CR 69,472** Database **Server Name** in Server Administration Tool 16.0 is missing.
- CR 69,438** Server Administration Tool `Copy Online Purge Log` is incorrect.

## SDK

- 11140** Optimize out calls to `Trace.getSource()` and `Trace.getTarget()`.
- 11141** `ChangePackage TypedResource` events do know their contained views. We receive the `view ID` in the XML message.
- 11142** Introduce a new server API `separateOutSessions` so that multiple users can log in and manage different `server_cacheManager` sessions.
- 11143** `User.LicenseType` not being set through the `webcache`.
- 11147** Custom component creation: `Property::isPrimarydescriptor()` and `Property::isDescriptor()` methods not working for new properties.
- 11151** The administrator used to login to the artifact cache should not need to login again.
- 11153** Update current `workrecord` from the task.
- 11154** `ObjectProperty.VALUE_NOT_SET` should be able to be passed into `newQueryPart`.
- 11155** Vault faker causing `artifactcache` to fail.
- 11159** Introduce a `logon` API which validates a user id/license from a different service, then impersonates the user via an administrative credential.
- 11161** Introduce a `validateClient` API on the `WebCacheServer`.
- 11170** Create proxy change packages for `Pulse`.
- 11191** `NPE` when `Atlas` running.
- 11194** Two new properties on topic.

- 11197** Add some new APIs for generalized links. Add a new `sessiontype.external` enumeration on `changepackage`.
- 11200** Attach `processitems` to the Pulse `changepackage` on commit.
- 11201** NPE in `server.java`, from Rhythm.
- 11204** Implement `ScmChangeSet` and `ScmChangeAtom` interfaces on `ChangePackage` and `Change`.
- 11206** `WebCacheLinkValue` should return type even for new items.
- 11207** Create `KanbanBoard` & `SwimLane` components.
- 11211** Implement cross thread view session synchronization.
- 11218** NPE in `server.java`.
- 11229** Create a new `General Text` property on `Story`.

## 16.1

The following fixes/updates were made for this release:

### Hub

- RPI 1108067** Upgrade the bundled JRE version to 1.8.112 and Tomcat Server to 8.5.9.
- CR 69,143** Fixed a bug where Pinned traces are no longer visible when an item is moved.
- CR 69,101** Fixed a label cache issue to dump deleted labels immediately from the cache so that another label with the same name is created successfully.
- CR 69,047** Added more contextual messages when an item is locked by a user.
- CR 69,045** Fixed an IEM bug to successfully import Test/Test Run filters queries.
- CR 68,975** Fixed server exception: `This folder cannot be deleted because some of the items are locked by another user.`
- CR 68,875** Fixed a server startup failure issue after upgrading to the newer version. A failed server start fails to rollback newly created database columns which in turn causes subsequent server restarts to fail.

### SDK

- CR11087** `Sprint.getStories()` should ignore duplicate stories.
- CR11067** Multiple moves of a tree item across parents, then finally to the tip, causes an exception to be thrown.
- CR11063** `WebCacheViewMemberCollection.getHistory()` throws a *Null Pointer Exception*, if a project has been deleted.
- CR11055** Several write optimizations improve performance inside the *Artifact Cache* and the *JobRunner*.
- CR11050** Introduce a new API `WebCacheView.getCount(WebCacheViewMemberType)`.
- CR11034** Optimize the query `WebCacheLinkValue.getView()`.
- CR11033** Fix a *Null Pointer Exception* when querying old filters for a null modified time.
- CR11029** Introduce a new API `WebCacheItem.getChangePackages()`.
- CR11027** Correctly return deleted traces from the recycle bin.

- CR11022** Introduce a new class `WebCacheServerConfiguration`.
- CR11021** Correctly display deleted items in a rolled back configuration web cache query.
- CR11007** Introduce a new API `WebCacheViewMember.toRestURL()`.
- CR11000** `Story.getParentSprint()` should return a Sprint, even if the Story/Sprint Relationship has more than one trace join.

## 15.1 HF1

The following fixes/updates were made for this release:

### Hub

- CR 68,155** Configure PING command behavior. Added server configuration setting `PingBehaviorForInactivityTimeout`. Not setting this, or a value of 2 preserves current behavior (ping commands touches last activity time, so the connection is never released due to inactivity, and the license for the user is not released). A value of 1 means ping command does not affect inactivity timeout, all it does is keep the server socket connection from closing. With this ping, it becomes a socket connection ping only.
- CR 68,186** Fix error when viewing an active trace with endpoint in deleted project.
- CR 68,181** Fix error when deleting an active trace with endpoint in deleted project.
- CR 68,188** Fix for server startup fails with error: `Property order mismatch in schema`.
- CR 68,175** Fix error, `Incorrect flags set for a custom enumerated property, when setting an enumeration to selectable`.

### SDK

- CR 10722** Filter/query `getOwnedBy` may return NULL.
- CR10724** Test suite fixes for Linux.
- CR10726** **File Update Status** incorrect when a *Symbolic Link* is checked in.
- CR10727** `VCMUnchanged since last merge` should still present a merge condition if there are content differences.
- CR10728** SDK internal attempt to query data fails if the network connection has been lost.
- CR10729** *Null Pointer Exception* fixed in ActiveMQ MPX message handlers.
- CR10731** Disable MPX inside `ArtifactCacheManager.unregister()`.
- CR10732** VCM now detects *File Change in Promote, Reverse Share, Rollback to Historical Revision*.
- CR10733** `stcmdEx exclude #excludeList` no longer loses the quotes around the file path.
- CR10735** Sharing a file from a rolled back configuration no longer shares revisions created after the roll back time.
- CR10737** `WebCacheLiveObject.getValue(WebCacheProperty)` no longer returns Content, LinkValue, does return their WebCache equivalents.
- CR10739** Pinning and unpinning Trace endpoints through the artifact cache no longer leaves stale data(target artifacts at fixed revisions) in the cache.
- CR10740** `stcmd` now provides a new `server-build` command.
- CR10743** Add new `EnumeratedValues` and new `Content Properties` for Atlas.

- CR10745** Fix a *Null Pointer Exception* processing the Unread Property for Traces on a post 15.1 server configuration.
- CR10746** Fix a *Class Cast Exception* in Content Equality Checking, identified by Atlas.
- CR10751** Add a test for ArtifactCache Order property value retainment across moves.
- CR10752** Fix a defect in the C# code generation which prevented `FileSyncInfo` interface from being surfaced in C#.
- CR107555** `stcmd` introduce a new `Select Query` report to count the number of changed lines of code for a process item.
- CR10758** Fix the *ArtifactCache* to prevent artifact visibility in sub-folders which are denied visibility.

## 15.0 HF3

The following fixes/updates were made for this release:

### Hub

- 68,031 - Fixed Custom Component creation issue when reserved word "name" is used.
- 68,026 - Fixed an issue when a Custom Component definition file is move to installed folder, even the Custom Component creation fails.
- 68018 - Fixed a issue where in server housekeeping threads block users from logging in.
- 68006 - Fixed a bug when a service is unable to run a domain user.
- 68096 - Fixed Import/Export Manager to support test and test run components.

### SDK

- r10694 - Overload `ArtifactCacheManager.register()` with a new api to red configuration from an /xml file.
- 10696 - Create copies of enumerated values when assigning them to their respective enumerated properties.
- 10698 - `Content.getMD5()` calls out to `Content.toBytes()` to prevent an `Illegal State Exception`.
- 10702 - Address a deadlock in the linux smoke tests.
- 10704 - Provide new sdk api to return REST urls.
- 10706 - Fix a stack overflow compiling the sdk after switching to java 8.
- 10708 - Fix tests that break when run using linux.
- 10711 - Handle passwords that contain embedded "" in command line encrypted password files.
- 10716 - Fix a null poinet excpetion when matching non branching vcm views.
- 10717 - Prevent adding files to folders which are exclusively locked.
- 10721 - Fix the artifact cache to prevent live traces from showing deleted items out of the recycle bin.

## 15.0 HF2

The following fixes/updates were made for this release:

### Server

**New Components** Atlas Hub now has *Test* and *Test Run* components.

**Installation** Fixed installer bug for double-byte code page for Simplified Chinese and Japanese.

### SDK

**10664** A *Test* component is a *Tree Item* type.

- 10663** Federated Trace Server Queries should not throw an exception for non-admin users.
- 10660** JobRunner Filter Creation tear-down code should not throw an exception. This masks possible `run()` exceptions.
- 10659** `WebCacheTrace::getSource()/getTarget()` missing a test for `isInternalLink`, resulted in an internal error.
- 10657** Introduce two new SDK components, *Test* and *TestRun*.
- 10656** The `transfer-traces` command should copy all trace property values across servers.
- 10655** `TraceFinder` should not throw a Null Pointer Exception querying a server with no projects.
- 10653** Introduce a `connections-log` query command.
- 10652** `List-users` command should provide all relevant user property values.
- 10651** A non-deleted `WebCacheTrace` should show deleted end point view members.
- 10650** `Client.java` has a redundant but required list of command names.
- 10649** JobRunner creating disembodied traces was setting a negative, incorrect `vmid`.
- 10648** Optimize and narrow the `RE_PIN` over `MERGE` rule to specifically target `REBASE` cases only.
- 10647** Extend `File.OPERATION` to include `attach` and `detach` enums.
- 10646** Change the `WebCacheItem::copy` signature to specify a `webCacheFolder`, potentially from a different project or view.
- 10644** `Server.logon(user, password)` returns a user whose `isMemberOf(Administrators)` always returns `false`.
- 10642** Add a `sendMail` api to `WebCacheServer`.
- 10640** Prefer `RE_PIN` over `MERGE` for files where the target tip is a revision from source history, and the target has not branched.
- 10638** Support creating a tree item and moving another tree item to it while in a transaction.
- 10637** Introduce a `File.Operation` class comprising `Checkin` and `Checkout` enums for a custom trigger.
- 10634** Introduce `WebCacheItem.copy` which supports `TreeItem` deep copy.
- 10633** Introduce `public static void dropUnusedCachesAfter(int interval)` api on `ArtifactCacheManager`.
- 10630** Introduce a generic query `getTracedItems(WebCacheItemType, Boolean targetOnly)` on `WebCacheItem`.
- 10628** Investigate Traces disappearance in the `ArtifactCache` in the presence of a `RecycleBin` that's being closed too early.

## 15.0 HF1

The following fixes/updates were made for this release:

- 67721** Sharing a Tree Item from a Recycle Bin to the tip throws an `Item Not Found` exception.
- 67712** New configuration setting `FederatedTraceServer` in support of Federated Trace Server.
- 67864** Deleted Stories are still displayed in the search results in Atlas Search perspective.
- 67868** Error after upgrading Atlas configurations using Oracle.

# Hot Fixes in Micro Focus Connect

## 3.0.1

The following fixes were made for this release:

- New sync criteria was not being stored correctly (any criteria with spaces in the operator wasn't stored as the correct criteria).
- Limitation in the UI prevented the adding of new or custom product types.
- If a field in a datasource contained a password and the field was no longer needed by the datasource, the password would be shown.
- If a non-SCM datasource contained only one Type (for example, Story or Task) then it was not shown as an option for creating a connection.
- Errors would show up in the log if a datasource was in the process of being created.
- In the default configuration for new users, the link from Story to Plan was incorrectly set to type `Execution`. It is now set to `Undefined`.
- In the default configuration for new users, the `Email Whiteboard Trace` type was empty. It is now set to type `Whiteboard`

## 3.0

This version contains a roll-up of all fixes provided through the 1.6 release in addition to new features targeted at improving configuration and usability. See the *What's New* section for further information on new features.

## 1.6 HF8

The following fixes were made for this release:

### Server

- When an item doesn't have history (i.e. newly created) comparing changes can result in error.
- Reduced the amount of log entries to improve review at information and debug levels.
- Add deleted properties to `getAllItems`, also fetch deleted folders in recycle bin.
- Fixed issue with custom connectors that add fields to types in the datasource.
- Fix performance issue with types having relationships.
- Include truncation capability and precision test for doubles in `isSameValueFix`.
- If the enumerated property is `Tag` then add `enumeratedValues` as needed.
- Fixed issues with mapping plan as a field.

### Rally Connector

- Fixed performance bug during sync of items, allow user to append project to iteration and release names.
- Fix issue when mapping rich text to rich text, don't strip HTML.
- Updated to allow for tags in Rally to be synced.

## 1.6 HF7

The following fixes were made for this release:

- Fix NPE: the trace value needs to be fetched to set the trace date.

- Support Vectors for `isSameValue`. (Specifically, allow users to set criteria on enumerated multi-select values).
- Don't apply offset if the type is `Date` (as opposed to `DateTime`).
- Fix check to prevent updating `StarTeam` with the same data. Fix NPE when generating Content object from null.
- Add check to prevent the update of the same value for a `StarTeam` property.
- Fix issues related to moving stories.
- Rally: Fix null pointer when listing projects if a project doesn't have a parent.
- Rally: Fixes for moving stories.
- VersionOne: Remove restriction that all enums are based from `AssetType List`.
- VersionOne: Support `Actuals` as a read-only property.
- VersionOne: Updated connector to use 16.0 SDK.

## 1.6 HF6

The following fix was made for this release:

- Fixed bug where an email exception was incorrectly interpreted.

## 1.6 HF5

The following fixes were made for this release:

- Fix to passwords/fields with #,\$,%
- Fix to hide plaintext passwords in `Connect.xml`.
- Don't shutdown when license is expired.
- Allow for cross project moves in Rally.
- Fix hierarchical projects in Rally
- Change HTML processing to improve reliability.
- Fix issues related to *first project in Jira* bug

## 1.6 HF4

The following fixes were made for this release:

- Fix production bug of `itemNotFoundException`.
- Fixed Encrypt passwords.
- Exceptions from meta queries are not logged.
- Log all `setValue` calls at Info level.
- Make the logs much more readable by not setting the thread name.
- Only restore a comment that was actually updated.
- Trap expected exception when a story and its linked task are deleted.
- Trim logging to 500 chars for a value, prevent NPE if parent property is specified for 1 dp and not the other, move static method to member, add faked Task properties to `getProperties` list, fix `ClassCastException` if property returns array of `SyncItem`, fix log method to log the stack, not the object.
- Protect against inability to find datasource, and provide user better information as to the problem.
- Read bytes from content property as UTF8.
- Make sure we have called `onStartSync` before accessing the members of a datapool.
- Don't ask for UTF8 chars when passing a string to Tika to strip.
- Remove `setupFailed` logic and fix bug if an exception is thrown after the view is opened.

## 1.6 HF3

The following fixes were made for this release:

- Fix parsing issue on `SystemEmailFrequency` when upgrading `connect.xml`.
- Fix issue with constant login on StarTeam (when setup fails).
- Fix ability to edit **HubDefault** data source in UI.
- Fix to sync of hierarchical issue changes (do them in order).
- Fix to UTF8 `getBytes` (bad high order character translation).
- Fix VersionOne connector images.

## 1.6 HF2

The following fixes were made for this release:

- One-Way Syncs**      If a *synchronization* or *TypeMap* is one way, then `create new` and `delete` are treated as `false` in the source.
- Synchronization Direction Tag**      The *Direction* tag for a synchronization is over-riding the *Direction* tag at a *TypeMap* level. For a user upgrading from pre-1.6 release, this conversion is now fixed and there is no change of behavior. For an existing 1.6.x user who upgraded from pre-1.6, this doesn't correct the behavior, but you may note the settings had unexpected values in the prior release. You need to manually change the settings if you desire the pre-1.6 behavior.

## 1.6 HF1

The following fixes were made for this release:

- 24115** Delete a *Type* from a connection and associated relationships are not deleted.
- 24196** `HubDefault` datasource produces an error.
- 24300** The datasource in the sample XML is called `OT`. It should be renamed to something more relevant like `SVN`.
- 24295** CA Agile Central: The sample XML contains an empty `ProjectMap`.
- 24111** There's a missing value map for the blocked field of task items.
- 24110** The `Connect.xml` file in the rest interface should have been set to `false` for CA Agile Central and Team Foundation Server.
- 24133** Items created in reference views should be recognized when Micro Focus Connect is looking at the *Root* view.
- 24134** There's a missing value map for the blocked field of task items.
- 24213** Subversion: Remove the required slash at the start of the name of the project in the `ProjectMap`.
- 24135** The default `Connect.xml` contains an empty project map for the VersionOne connector that breaks the whole configuration.
- 24138** VersionOne: In Micro Focus Connect 1.5, the VersionOne connector terminates with `Can't find property named Usr_EpicStatus in type Story`.
- 24137** Modifications of value maps via the UI are not being saved in Micro Focus Connect 1.5.
- 24136** Update default `Connect.xml` generated by the REST so that `deleteItems` is `false` for Team Foundation Server and CA Agile Central.

- 24226** Subversion: Update dependencies in the documentation.
- 24198** Team Foundation Server: Unable to list projects from the Team Foundation Server.
- 24089** VersionOne: With the default VersionOne connector setup in Micro Focus Connect 1.5, items deleted from StarTeam are not being deleted in VersionOne.
- 24415** CA Agile Central: Type data wasn't initialized properly.
- 24107** The default `Connect.xml` contains an empty project map for the VersionOne connector which breaks the configuration.
- 24098** Modifications of value maps via the Micro Focus Connect UI are not being saved in version 1.5.

## Hot Fixes in Rhythm

### 5.0.1

The following fixes and general improvements were made for this release:

<b>Minimum version of Hub</b>	Verification of the minimum required version of the Atlas Hub supported at server startup.
<b>Performance</b>	Various performance improvements and enhancements.
<b>1113012</b>	Description field in CSV Export can be <code>Plain Text</code> .
<b>1110797</b>	Search defaults to <code>&lt;current project&gt;</code> .
<b>14781</b>	Improved display while uploading attachments.
<b>1109393</b>	The <b>Cumulative Flow</b> diagram can be collapsed in <b>Tracking</b> .
<b>1113146</b>	Improved responsiveness of <b>Save</b> and <b>Save &amp; New</b> in rapid creation of Stories and Tasks.
<b>14787</b>	Improved warning message when deleting Stories that have children.
<b>1113261</b>	Resolve application hang when too many browser tabs are open.
<b>14806</b>	Resolved incorrect Code Review Status displayed in Grids.
<b>14776</b>	Resolved 404 errors when navigating to Git Change Packages.
<b>14767</b>	<i>Search by ID</i> was not working in <b>Select Parent</b> dialog box.

### 5.0

The following fixes were made for this release:

#### **1112166: Making a Project Public**

Resolved a permissions issue switching between public and private projects.

#### **1109158: Story ID in Rhythm offset by 1 from StarTeam Cross-Platform Client**

Adjusted the Rhythm **ObjectID** used to match the default **ID** used in the StarTeam Cross-Platform Client.

#### **1110983: The filter only applies to the current page in backlog view**

**Backlog** view updated to support filters spanning multiple pages.

**1111560: Backlog items show as Not Started when the story is complete**

Corrected issue where some stories do not properly display as completed.

**1112631: Setting ALMServiceUrl in Atlas Hub config with scheme breaks goto links**

Atlas/Rhythm adjusted to detect Apache Tomcat configuration and automatically apply protocol to generated URLs.

**1110759: When editing a story it is easy to overwrite and lose data**

Users are prevented from inadvertently overwriting each others changes.

**1111207: Problems with drag-drop ranking in backlogs**

Corrected issue with backlog drag/drop positioning not working as intended.

**1112513: Documentation does not reflect need for MPX/ActiveMQ**

The requirement for Rhythm needing MPX configured has been added to product documentation.

**1109772: Filtering - Cannot select Unassigned as a filter option for Sprint and Releases**

Rhythm allows users to create filters selecting Stories that are not assigned to Sprints and Releases.

**1111205: Copy links to Story from Backlog**

You can now copy the direct access URL from each item in the **Backlog**.

**1111529: Login problems using REST API**

Corrected intermittent issue with REST login,

**Significant performance improvements**

Rhythm has received significant updates in performance, responsiveness, and scalability.

**Provide ability to configure Tracking view for Points or Stories**

The Tracking view now presents the option to view data based on Story count as well as Story points.

**Auto-collapse empty swimlanes when applying filters in Kanban boards**

Kanban board collapses empty swimlanes when filter is applied.

**Compare Dialog now includes changes in relationships**

Atlas/Rhythm provide ability to view relationships (manual and system) when viewing version differences.

**Added General attribute to Stories**

Rhythm now provides generic **General** attribute on Stories for tracking miscellaneous user defined data

**Provide ability to update files attached to requirements and stories**

Atlas/Rhythm provide the ability to update attached files (without delete and re-add).

**Only create new Story revision when differences exist in content**

Save only creates new versions when differences are detected.

### Provide ability to maximize text editor to fill full browser window

Rich description editor has been updated to include a maximize button.

### Provide Kanban Sprint list in sequential order

Sprints are now listed in order on Kanban boards.

### Change version compare attribute list to identify Sponsor as Owner

Compare dialog box has been updated to correctly list **Owner**.

## 4.3

The following fixes were made for this release:

- Stories from multiple Sprints in **Team Room** appear when navigating through Sprints.
- .PNG is not recognized as image.
- RPI 1109924: Notification emails sent when using @user in a conversation contain broken URLs back to the conversation.

## 4.2

The following fixes were made for this release:

- Laptops/devices with touch-screen support do not fire `Click` event.
- Advanced image editing properties in Google Chrome does not work.
- **Tag** column in grid limited to column width.
- Display `Pts.` in Release and Sprint editors.
- Delete child Story in **Breakdown** should reload in the same place.
- Allow users to see `Processing` and `Complete` message with **Filter** dialog box open.
- Server administrator show both as `Administrator` and `Atlas Contributor` for same project.
- Keep selected item selected when clearing filter (**Backlog/Breakdown**).
- Unexpected error when reached the maximum number of **Favorite** projects.
- **Filter Editor** list wraps values, hard to read.
- **Edit Sprint** panel: **OK** should be disabled if no change.
- **Assigned Stories** column of Releases displays Sprints in count.
- Drag third level child item outside the top parent returns unexpected error.
- External URL from `Content service` is escaped, but not un-escaped before launching.
- Change filter ellipsis (...) to **X** for remove items.
- Email notifications do not retain carriage returns.
- Planning views are not sticky.
- **Timeboxes** dates edit does not provide validation feedback.
- **Team Room** sort order not kept for next usage.
- Show `Loading` indicator on **Copy Tasks from** and **Story Parent** dialog boxes.
- Changing **Task Est.** doesn't immediately change **To Do**.
- Do not decrement **To Do** hours if there is a newer work record.
- Recording time does not decrement grid until refresh.
- Export order is random.
- **Breakdown**: Parent items included via filter still show expand action in UI.
- Editing a Task does not prompt for save when dirty.
- Disable **Create** button while processing in **Team Room** quick create.
- **Team Room (Sprint list)**: Sort column when grid is dirty cancel the changes.

- **Edit Task** dialog box: Change only Task status not gives you save option.
- Rhythm viewer is displayed in the Task\Story owners list.
- Filtering **Team Room** lag using Internet Explorer.
- Admin Tools appear for Project Contributor.
- **Timeboxes**: Assigned Release while creating a Sprint is not displayed in grid.
- Delete a Sprint with Stories prevents those Stories being added to another Sprint.
- Diagram loading too much data and is slow.
- Contributor/Viewer can not open View Input Streams from **Team Room** grid.
- Prevent record time if estimate is dirty.

# Troubleshooting

**Trouble with Micro Focus Connect** In situations where you are having trouble with your `Connect.xml` and it may be corrupt, you may want to use a previous version of the `Connect.xml` file:

1. Navigate to `<APTS install dir>\MicroFocusConnect\AppData\backup\`. You will see a list of `Connect` files there.
2. Copy the version of the `Connect` file that you want to use. The files are named in the following format: `Connect.yyyy.mm.dd.hh.mm.ss.mmm.xml` (mmm = milliseconds).
3. Rename that file to `Connect.xml` and paste into `<APTS install dir>\MicroFocusConnect\AppData\data\`.
4. Restart Micro Focus Connect.

# Known Issues

This section contains any Known Issues for this release.



## Reconfigure Services

The Atlas Planning and Tracking Suite installer will reconfigure services which were created by the Atlas Planning and Tracking Suite installer. If you have created your services manually, you need to reconfigure them manually since Atlas Planning and Tracking Suite installer has no knowledge of these services.

## Release Filter for Rhythm

A new property has been added to the Atlas Hub which enables Rhythm users to filter by **Release**. If a filter is saved in Rhythm with **Release** criteria specified, that filter will throw an exception if used to query items in older StarTeam clients. If you wish to use the new filter in the StarTeam Cross-Platform Client, you must upgrade to version 16.0 Hot Fix 1 of the client.

## StarTeam Agile Contributor Users

For teams that use StarTeam Agile, a one-time permission reset for `Contributors` is advised when they move to Rhythm. This can be done in **Admin Tools** via **Project Access Rights** and choosing **Reset Permissions**. This does not negate the existing StarTeam Agile permissions, it just adds more permissions that are required for `Contributors` in Rhythm.

## StarTeam Agile Project Administrators

There are cases where Users with `Project Administrator` rights in StarTeam Agile do not get these rights carried over into Rhythm. For these cases, re-assign `Administrator` rights in Rhythm to resolve the issue.

## Micro Focus Connect Rally connector: sync on changes to sprint state fails with error

Mapping a property to the `Comment` property in StarTeam will result in an error if that property is the only property on the StarTeam item that is changed. To fix this issue: completely remove the mapping or change the mapping on the StarTeam side to a field other than "Comment".

## Micro Focus Connect: Server and rest logs don't display properly unicode characters

When a datasource/synchronization name is composed of Cyrillic/Japanese characters, question marks are displayed both in the rest log and the server log.

To fix this issue:

If you want to use any non-English characters in your datasource names, project names, or mappings and want them properly displayed in the logs, you need to adjust your log4j configuration as follows.

<b>Server log configuration file</b>	C:\Program Files\Micro Focus\Atlas Planning and Tracking Suite\BorlandConnect\log4j.xml
--------------------------------------	---

<b>Rest log configuration file</b>	C:\Program Files\Micro Focus\Atlas Planning and Tracking Suite\WebServer\webapps\borlandConnectRest\WEB-INF\conf\log4j.xml
------------------------------------	--

The following line needs to be appended in the DEFAULT appender in both configuration files:

```
<param name="encoding" value="UTF-8"/>
```

Here's an example:

```
<appender name="DEFAULT"  
class="org.apache.log4j.RollingFileAppender">  
<param name="Append" value="true"/>  
<param name="MaxFileSize" value="50MB"/>  
<param name="MaxBackupIndex" value="20"/>  
<param name="File" value="BC-Log.log"/>  
<param name="encoding" value="UTF-8"/>
```

Otherwise any Unicode strings in the log will be displayed as question marks.

# Installation

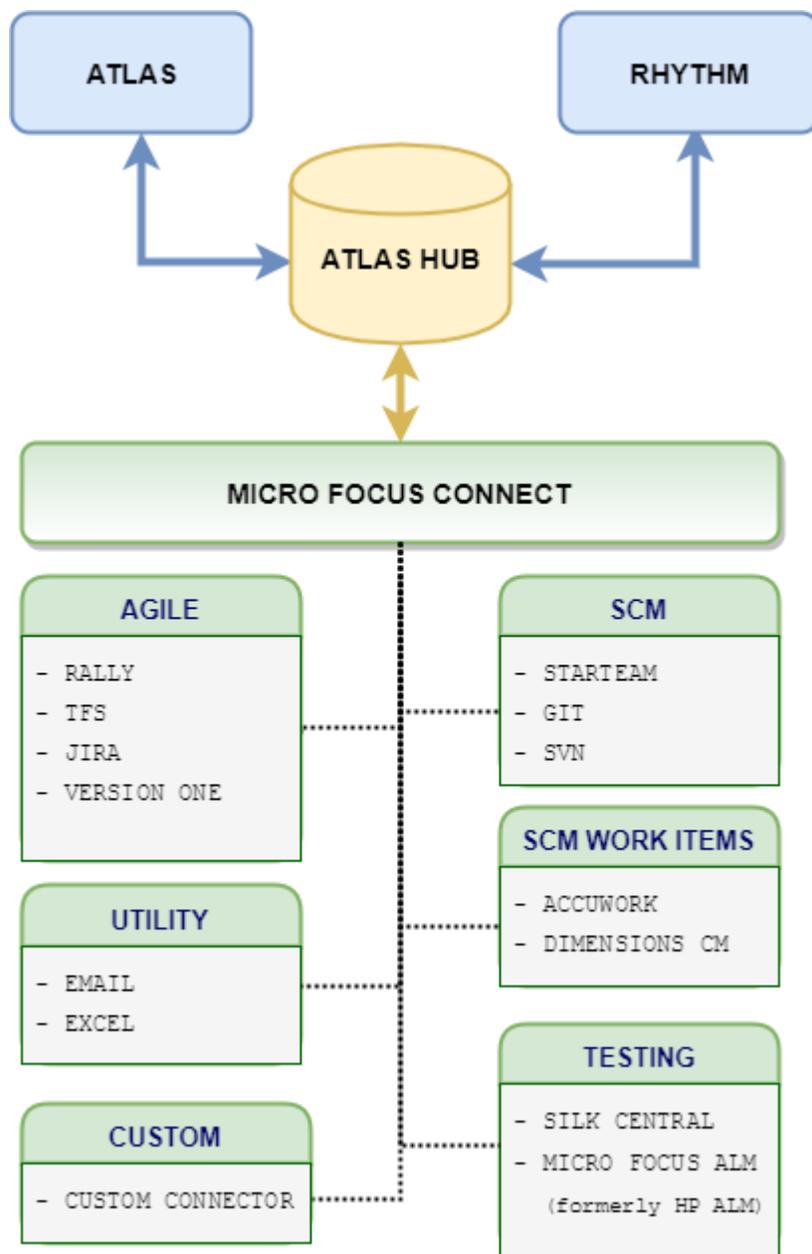
You are about to install the **Atlas Planning and Tracking Suite**. Before proceeding with installation, prepare the following items:

- A 64-bit quad core system with 16 GB RAM that meets the full set of system requirements.
- A database. If you do not have a database to use, a PostgreSQL database will be installed and configured by default. If you have one of the supported database types, you will need to continue to configure your database post installation.

A fully installed and configured **Atlas Planning And Tracking Suite** contains the following applications and components:

<b>Atlas</b>	A collaborative, flexible, agile requirements and delivery platform. It will be installed and run in a Tomcat server.
<b>Rhythm</b>	Rhythm is an agile project tracking tool designed to allow you to organize, prioritize, and manage your Agile teams' backlogs. You can plan your sprints, task out the work, and then track progress throughout the sprint. It provides comprehensive visibility of all your Agile assets. Rhythm should be used in the place of StarTeam Agile.
<b>Atlas Hub</b>	A software change and configuration management server that stores the assets.
<b>Database</b>	Atlas Hub connects to and supports many databases. If you do not have one installed, PostgreSQL will be installed.
<b>Micro Focus Connect</b>	A web application that allows you to synchronize assets from third party tools into Atlas Hub (and thereby, into Atlas). For example, you could connect Atlas Hub to Rally via Micro Focus Connect and have all stories from Rally appear in Atlas.
<b>Tomcat Web Server</b>	Two Tomcat web servers are installed. One runs Atlas, Rhythm, and Micro Focus Connect and the other runs the Search component.

The following depicts how the components are connected:



## Installing the Atlas Planning and Tracking Suite

The following steps describe how to install the Atlas Planning and Tracking Suite. The suite includes Atlas, Micro Focus Connect, Rhythm, and Atlas Hub. These applications will all be installed together.

Please note all of the following before continuing with your installation:

**⚠ Important:** The installation package must be installed on an English language operating system.

- If you want to install the Atlas Hub on a separate server, you should plan to do that first. Go to that server, run the installer and select the **Atlas Hub** option on the **Choose Install Set** screen. Complete that installation. Then, on the server for the web applications, choose the **Atlas Planning and Tracking Suite** option, during the installation, you will be asked to point to an existing Atlas Hub, the one that you just set up.

- If you have Atlas Planning and Tracking Suite 2.0 or greater installed, you do not need to uninstall before your upgrade. Please note the following:
  - Upgrading Atlas Planning and Tracking Suite to the latest version involves upgrading the Atlas Hub as well. A valid license key is required during the install process.
  - The current option to perform a *Hub Only Upgrade* on top of Atlas Planning and Tracking Suite 2.0 is not supported.
  - If you are a current Micro Focus Connect customer, your version of `Connect.xml` will automatically be saved for you during an upgrade. It is available in the `<APTS install path>\MicroFocusConnect\AppData\data` directory. Backup versions of this file are available in `\AppData\backup`.
- We recommend backing up the Atlas Hub installation directory in order to preserve your configuration files.
- When upgrading from StarTeam Agile to Rhythm, it is necessary to migrate **Target Releases** from the StarTeam Agile Release Views to the Rhythm Releases. This migration is accomplished by running the below command using the StarTeam 16.x SDK that is installed with the Atlas Hub:

```
stcmd rhythm-conversion -p "user:password@host:port/project name/"
```

Running this command will do the following:

- Create new Releases in Rhythm that match the **Target Releases** in StarTeam Agile. All Stories and Sprints that have a **Release** value set will also be updated. If you run the migration command after assigning **Release** values in Rhythm, then those assignments will be removed as the purpose of the migration is to match up the **Target Release** data in StarTeam Agile with Rhythm.
- Each Story in the Project will receive updated values on the **Rank** and **Order** fields which are compatible with the Rhythm UI. The overall **Rank** and **Order** of the Stories in the Project **Backlog** will be retained and all new Story revisions will have a "Rhythm Conversion" comment.

#### 1. Run the installer.



**Note:** During an upgrade from a previous version, the Atlas Planning and Tracking Suite installer expects valid license keys. The Atlas Hub will fail to start if license keys are invalid.

2. Read the introduction and click **Next** on the **Introduction** screen.
3. Read the license agreement, select the option to accept the license agreement and click **Next**. The **Choose Install Set** screen appears. This is where you will be able to install either all of the applications or just install a new Atlas Hub.
4. To install all of the web applications, choose the **Atlas Planning And Tracking Suite** option to install Atlas, Rhythm, Micro Focus Connect, and optionally, Atlas Hub. Click **Next**.
  - a) Select where you want the files installed on the **Choose Install Folder** screen. Do not click **Next** until you read the following:



**Important:** The next part of the installation is where you choose the location. If you are upgrading, you need to make sure that you select the existing directory where the previous version was installed. However, if you chose a different location, you must browse to that folder and select it for the upgrade.

If you are upgrading, you will receive an **Upgrade Required** message. Click **OK** and walk through the upgrade screens. Your upgrade will complete, and you are finished with the installation!

If you are not upgrading, click **Next**. The **Atlas Hub Connection** screen appears.

To connect to an existing Atlas Hub:

1. Select **Connect to existing Atlas Hub**.
2. Click **Next**. The **Atlas Hub Parameters** screen appears.
3. Enter the Atlas Hub connection information:

**Atlas Hub Host Name or IP Address**

The IP address of an existing Atlas Hub installation.



**Important:** When specifying the address and port for Atlas Hub in either the installation wizard or directly in the `ALMConfiguration.xml` file, you must use the actual IP address (or machine name) of the Atlas Hub. Do not use "localhost" even when Micro Focus Connect and the Atlas Hub are running on the same machine.

**Configuration Name**

The configuration name of an existing Atlas Hub installation.

**Configuration GUID**

The configuration GUID of an existing Atlas Hub installation.

**Configuration Port**

The configuration port of an existing Atlas Hub installation.

**User Name**

The user name of an existing Atlas Hub installation.

**Password**

The user's password of an existing Atlas Hub installation.

4. Click **Next**.

To install a new Atlas Hub:

1. Select **Install new Atlas Hub**.
2. Click **Next**. The **New Atlas Hub** screen opens.
3. Enter a **Configuration Name** for the new Atlas Hub.
4. If you already have a license key, select the **I have a license key** option.
5. Enter the license details.
6. Click **Next**.

5. To install the Atlas Hub only, choose the **Atlas Hub** option on the **Choose Install Set** screen.



**Tip:** After installation, if something goes wrong or a file is damaged or corrupted, you can attempt to repair the install by running this installer again

If you are upgrading, you need to:

1. Stop all Atlas Hub server configurations using the Atlas Hub **Admin Tool**.
2. Close the Atlas Hub **Admin Tool**.
3. On the installer screen, click **Next**.
4. Click **Install**. The installer will install all upgrade files.

You are finished upgrading the Atlas Hub!

If you are not upgrading, click **Next**.

1. Select the **Message Broker** option to install the Message Broker.
2. Select the **PostgreSQL** option to install a PostgreSQL database.
3. Click **Next**.
4. If you are installing a message broker, the **Message Broker Options** screen opens. Enter the port number on which the broker will listen.
5. If you are installing PostgreSQL, the **PostgreSQL Configuration** screen opens. Enter the password for the database superuser. Note that the username is `postgres`.
6. Click **Next**.

The **Choose Shortcut Folder** screen opens.

6. Select the shortcut folders and click **Next**. The Pre-Installation Summary screen opens.
7. Review the information and click **Install**.

# Additional Configuration for Connecting to Existing Atlas Hub

If you chose the option to **Connect to existing Atlas Hub** in the Atlas installation wizard, the following configuration changes are required before using Micro Focus Connect with Atlas:

1. Open the Micro Focus Connect UI.
2. Navigate to the following data source: `Hub DataSource`.
3. Replace the default credentials with the correct account details for the Micro Focus Connect user (this should be a server administrator account) in the **User Name** and **Password** fields.
4. In the **URL** field, replace the default StarTeam URL with the correct URL value.
5. Save the data source.

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