| **Name** | **Description** | **Type** | **User Group** | **Issue ID** |
| --- | --- | --- | --- | --- |
| Issue with URL encoding after rtf/docx conversion | This fixes an issue where links are URL encoded whenever a description is converted to RTF or DOCX which broke already URL encoded links. | Bug fix | API | 17898 |
| XML Import: Fail when a part refer to part, description ref to part | This fixes an import issue when there are two parts pointing to a part.  | Bug fix  | Architect | 17663 |
| swArchitect: Out of sync upon ClearDefType | This fixes an error where attempting to clear the DefType on a Part in the swArchitect resulted in an access violation and the server requiring a restart. It is no longer possible to clear the DefType as a Part requires a DefType at all times. DefType cannot be null. | Bug fix  | Architect | 16784 |
| Edit XML: Right-click Copy does not work | This fixes a problem with the right-click **Copy** option in the Edit XML not working as expected. | Bug fix  | Architect | 17973 |
| Client unexpectedly closed | This fixes an issue where the client unexpectedly closed when interacting with the Projects tab. Note: This fix was also included in Kviberg (R44).  | Bug fix  | User | 18061 |
| New issue: Better information for string attributes with constraint | The **New issue** dialog now has improved handling of regular path expression constraints. Users receive clearer feedback when they input a value into a String-type attribute that does not adhere to a constraint. And, the new issue cannot be created until a valid value is entered. Previously, no information was given. In the below example, the Component attribute requires that the value begin with the letter "B". The issue cannot be created if a value not conforming to the constraint is entered. Previously, no information was given.  | Bug fix  | User | 18247 |
| Extensions: Removal of default Extensions ribbon group | The following four (4) SystemWeaver extensions are no longer hard-coded to the Extensions ribbon group: * SWExtension.ComponentGraph
* SWExtension.FaultTreeGraph
* SWExtension.ReqifRoundtripImporter
* SWExtension.RequirementsQualityMetric

This is a breaking change if you would like to have shortcut(s) on a ribbon tab. To have shortcuts display on a ribbon, you must now add them to the ribbon group of your choice, and can utilize the available **ItemView** configuration element to do this. Example: <RibbonGroup caption="My ribbon group"> <ItemView name="SWExtension.FaultTreeGraph.ItemViewContent"/> <ItemView name="SWExtension.ComponentGraph.ItemViewContent" visibility="Always"/> <ItemView name="SWExtension.ReqifRoundtripImporter.ReqifRoundtripViewContent"/> <ItemView name="SWExtension.RequirementsQualityMetric.ItemViewContent"/></RibbonGroup>Note that they will still appear in the View drop-down menu when activated by the selected item type:  | Improvement  | Architect | 18197 |
| swExport: Introduction of configurable graph export | There is now support for exporting a configurable Graph via command line using the swExport tool. Supported export file formats: * png
* jpg
* xps
* graphml

This tool's graph export functionality has no required meta model, or item structure. It is suitable for all configurable graph use cases, and provides support for specifying parameters. Because swExport can also be used for Document and configurable Grid exports, it is required to set the *type* attribute to "graph" for graph exports. See the executable's Help for information about options. **Example Command Lines**Using Username and Password:swExport serverUsername="admin" serverPassword="wagadoff" serverName=sys7 serverPort=1355 type=graph fileFormat="png" filename="SystemModel.png" itemID=x040000000001C3D7 configItem=SI0167:SystemModel Using Network Authentication:swExport serverName=sys7 serverPort=1355 type=graph fileFormat="png" filename="SystemModel.png" itemID=x040000000001C3D7 configItem=SI0167:SystemModel With parameters:swExport serverName=sys7 serverPort=1355 type=graph fileFormat="png" filename="SystemModel.png" itemID=x040000000001C3D7 configItem=SI0167:SystemModel parameter="(ShowExtended;false)" parameter="(ShowEvents;true)" parameter="(EventsContext;x0400000000021411)**Example Result**  | New  | User | 16226 |
| CommMatrixImporterExporter: Signal group and Multiplexed frame | The CommMatrixImporterExporter extension view now supports the following: Signal Groups in a frameMultiplexed frame | Improvement | User | 17994, 17993 |
| New issue: Support for string array attributes | There is now support for array of String attributes in the **New issue** dialog.Note: Support for regular expression pattern constraints for array of String are not yet supported [15777]. | Improvement | User | 18155 |
| Web TARA solution coming soon! | Web TARA (Threat Analysis and Risk Assessment) - Coming soon!Want to learn more? Contact us via https://systemweaver.com/get-started.  | New | User | 18182 |
| New issue: Improved display of single enumeration values | Single Enumeration attributes now display color in the **New issue** dialog. In addition, the attribute editor for single Enumeration in this dialog is now a drop-down that includes any existing description text. | Improvement | User | 18293 |
| New issue: Support for user attributes | There is now support for displaying attributes of type User in the **New issue** dialog. | Improvement | User | 16943 |
| Workflow feature: New Open process graph option | A new **Open process graph** option has been added to the Workflow feature. Right-clicking on a Process in the Workflow feature and selecting Open process graph will open the Process in a new tab and display it graphically. Configuration example: <WorkflowConfig id="111"> <ViewSettings> <Caption>WorkflowItemView Config 1</Caption> <RibbonGroup>Workflows</RibbonGroup> <Description>Tip</Description> <Image guiImage="31"/> </ViewSettings> <ProcessItem id="x04000000000050A6"/> <ProcessGraph configItem="SI0239:Process"/></WorkflowConfig> | Improvement | User | 18079 |
| Workflow feature: Support for Path Query Language | It is now possible to use the Path Query Language in the Procedure configuration of the Workflow feature. The feature can now be run directly on the TopItem instead of looking for all items resulting in improved performance. To do this, add TopItem to the Workflow Activation SID attribute. Options are: * TopItem/PartSID
* TopItem.Handle

 | Improvement | Architect | 18227 |
| swExport: Improvements to Document export | Document exports using the swExport tool now include content coming from: * Graphs generated using GenerateGraph in definition
* Component Graph (extension view)
* Fault Tree Graph (extension view)
* Jira integrated data (extension view)Note: The user must have saved a login for Jira in the swExplorer client.
* Yellow Graph view

**Note:** The output may contain an additional empty page if the graph does not fit on a page.  | Improvement | User | 16226 |
| Extensions API: GetConfig | A new method IswWorkflowDescription.GetConfig(IswIssue description)has been added to the Extensions API to be able to get the workflow permissions for a given issue. | Improvement | API | 18073 |
| Extensions API: SWDescription.IsEmpty | A new method SWDescription.IsEmpty(IswDescription description)has been added to the Extension API to check if a description is empty or not. | Improvement | API | 18150 |
| Extensions API: SWAccessMode.Contains | We have introduced a Contains extension method to AccessCodes so you can write:ObjectAccess.Contains(...)instead of:ObjectAccess.HasFlagThis makes it possible for your code to be simultaneously compiled against both the Extensions API and ClientAPI. | Improvement | API, Extensions API | 18013, 18322 |
| Database: Upgrade of database version | The database version identifies the version of the internal database schema used by SystemWeaver. With Lunden (R45), the version has been upgraded from 1.45 to 1.46. This is a breaking change. System Administrators use the swDatabaseManager to update the database version. See <https://support.systemweaver.se/en/support/solutions/articles/31000161969-updating-the-database-version>.* Review the Prerequisites for the update operation outlined in above article.
* Maintain a copy of the original database.
* The database update operation takes less than 1 minute to complete.
* If you need to restart the **Update** operation, close the application in between update attempts.
* If running a mirror server:
	1. Journaling must be cleared and re-initialized after the version update. Previous .swjournal file cannot be used.
	2. New mirror .cache files must be created. Previous .cache files cannot be used.

Example upgrade from database version 1.45 (Olskroken (R43)-Kviberg (R44)): | Improvement | IT Admin | 18228 |
| Requests: New progress view for status changes and requests | In this release, we introduce an additional Notes tab to the Issue editor to make it easier to specifically view the progress of an issue when **Request for status change** is used. It appears only when the workflow includes one or more Request for status change. In such a case, two tabs will now appear: * A **Changelog** tab which lists all logged events for the issue (this is the same primary Notes view as in earlier versions).
* A new **Progress** tab which lists only events related to Status changes and Requests for status change.

In the above example, the status was first set to "New". Then, a Request to change status to "In Progress" was started and completed, and both Stacey Klein and John Smith have approved it and included comments. Longer approval/rejection comments and previous comments can be viewed in their entirety by hovering over the comment icon. as shown above. All Request related logged events also appear on the Changelog tab. If no Request for status change is used, only the primary Notes tab will display, as before. | Improvement | User | 18034 |
| swExport: Updated help | The instructions in the swExport application's Help are clearer.  | Improvement | Architect | 18238 |
| Password management improvements | As part of our ongoing commitment to security, we have implemented further improvements to password security. | Improvement | IT Admin | 17676 |