

# Release and Upgrade Notes for Track+ 3.8.0

## Release 3.8.0

Release 3.8.0 comes with some major improvements regarding usability and performance. It fixes all known defects from previous releases. This release does require a database schema change.

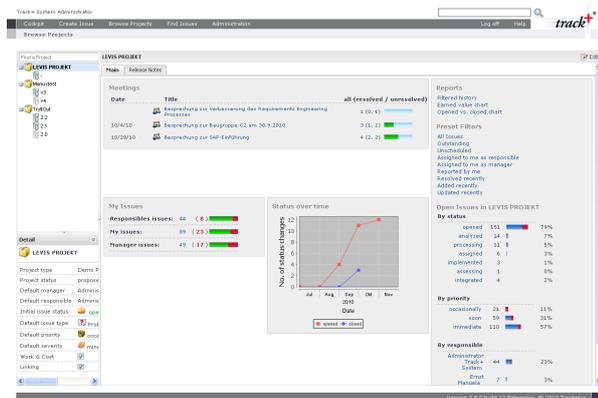
## Benefits of New Version

The following bug fixes and new features have been implemented with release 3.8.0 compared to release 3.7.5:

## Project Specific Cockpits

Next to a general cockpit you now have project and release specific cockpits. This gives you fast access to project or release specific views, like all open issues in a certain release, or the current release status, or the development of open issues vs. closed issues over the last several weeks.

The cockpit layout can be chosen differently for each project and releases. Most cockpit views automatically limit their data to the project or release of the cockpit they are in. Each project has a project default cockpit layout which users can overwrite locally.



## Project Navigator Cockpit Widget

The project navigator widget offers a number of useful links to reports and queries. It also gives a quick overview over issue assignments and issue statuses. The reports to include as quick links can be selected from the total list of available reports in the system.

## Meetings Cockpit Widgets

Track+ now comes with a special issue type called "Meetings". The Meetings cockpit widget shows all meetings that you have

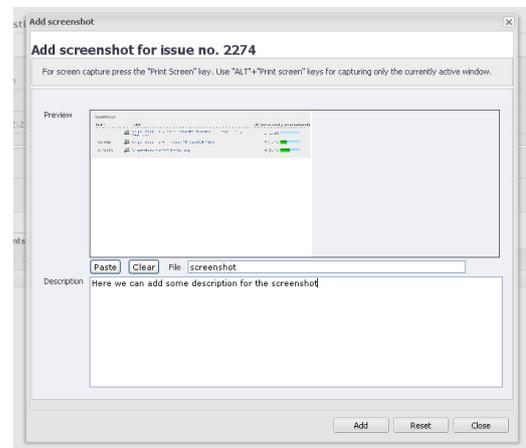
been invited to and that have open issues as children.

During the meeting, action items can be added as children to the meeting. It is then clearly visible if all action items of a meeting have been taken care of.

Meetings		
Date	Title	all (resolved / unresolved)
	Besprechung zur Verbesserung des Requirements Engineering Prozesses	1 (0, 1)
10/4/10	Besprechung zur Baugruppe C2 am 30.9.2010	3 (1, 2)
10/28/10	Besprechung zur SAP-Einführung	4 (2, 2)

## Screenshot Applet

Track+ now permits you to directly copy image data from the clipboard as attachments into the application. Using the "Add screenshot" button opens a little window where you can paste your screenshots, and the upload them as attachment to the Track+ server. This saves you a lot of time when you oftentimes have to submit issues that include screenshots.



## Improved Issue Overview

The issue overview layout, that is sorting, column selection, size and position, and grouping can now be defined for each query, even for links coming from the cockpit.

This permits you to select a different layout for the list of bugs, and the list of requirements. The list of issues that you are responsible for can have a different layout than the list where you are manager.

You configure the layout as before, by dragging and dropping columns, resizing them, or choosing grouping and sorting. Track+ remembers these settings for each query that you have run.

It is now possible to select and drag issues in the overview to

other issues, making them to child issues of the target issues. This is a great time saver if you need to create issue hierarchies.

## MS Project Export and Import

You can now import data from MS Project and export data to MS Project. When importing data, a synchronization between MS Project and Track+ takes place.

With this release, a new issue type has been introduced, called "Tasks". Only tasks are exported to MS Project, and imported data from MS Project only synchronizes with tasks. This permits you to keep non-plannable data like bugs, issues, action items, meetings, etc. separate from the planned items.

This function permits you to use the power of MS Project for planning purposes, and use the power of Track+ for project control and tracking.

## Enhanced Excel Export and Import

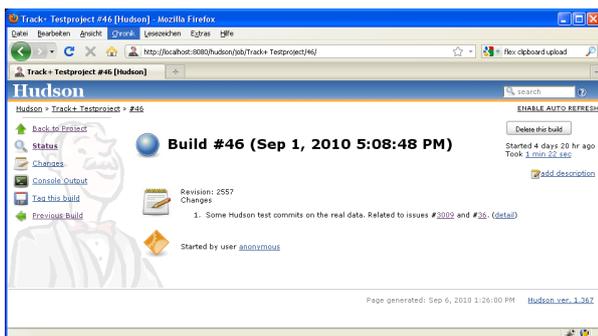
The import from Excel sheets has been enhanced, to make synchronization between existing Track+ issues and Excel sheets more efficient. It is now possible to export issues into an Excel sheet, change issue data there, and import it back some later time. The import process automatically merges the data wherever possible, and asks you for resolution in case of conflicts.

## Encrypted E-Mail Server Connections

Track+ now supports encrypted connections to e-mail servers via SSL and TLS. You can store different certificates for each project, if required.

## Support for Hudson

Track+ provides an adapter for the Hudson continuous integration server. In Hudson, there will be links created that point into Track+, and in Track+ there is data coming from the Hudson continuous integration server relating to builds and tests run there.



## Support for Maven

Track+ supports the "changes" interface of Maven. It is thus possible to draw a list of all changes relating to a specific Maven build or release automatically into the Maven documentation structure. The interface is very flexible; any query that can be defined in Track+ can be used as a link source in Maven.

## Permanent Links

It is now possible to create permanent links for query executions. This permits to publish query result sets for users that do not have an account with the Track+ server.

## Parameterized Query Filters

It is now possible to include parameters in a query filter. For example, a filter can be completely defined, but the release is inserted as a parameter. When you run a query using this filter, you will be prompted to select a release. The query is then run with all predefined filter parameters, plus the release that you selected.

## Minor Bug Fixes

There have been very few bugs reported for the previous release. All could be fixed with this release.

## Upgrading from Previous Releases

Updating your Track+ application can be split into

- update of database
- update of application

A database update is not required in each case and depends on the version you want to update from.

If you have been using the installer in the past, and have not changed the database connection parameters in file Torque.properties, you can just run the new installer for an update. It will take care of everything. The following sections you need to follow if you have installed or changed your system manually. If you can use the Windows installer, skip these sections.

## Database Update

You need to upgrade the database when you upgrade from release 3.7.x or below. The following database upgrading scripts are available:

Coming from release 2.0.6 or 2.1.0:

- migrate210to300.sql
- migrate300to310.sql
- migrate310to320.sql

Coming from release 3.0.x:

- migrate300to310.sql
- migrate310to320.sql

Coming from release 3.1.x:

- migrate310to320.sql

Coming from release 3.2.0:

- migrate320to330.sql

Coming from release 3.3.x:

- migrate330to340.sql

Coming from release 3.4.0:

- migrate340to350.sql

Coming from release 3.5.x or 3.6.x:

- migrate350to370.sql

Coming from release 3.7.x:

- migrate370to380.sql

The scripts can be found in the database package you can download separately. You have to run these scripts in the order listed above, beginning with the script corresponding to your current Track+ version. For example, if your current version is 3.3.2, the first script you need to run is migrate330to340.sql.

How to run these scripts depends on your database system. You can run these scripts either as a database administrator (e.g., root with MySQL or SYSDBA with Firebird), or under the account that Track+ uses to access the database and that you or somebody else have entered previously in file `webapps/track/WEB-INF/Torque.properties`.

The Track+ manual contains detailed descriptions for most major database systems.

**Please do not upgrade a live system!**  
**Make sure you can go back to the current installation!**  
**Run tests before you release the new installa-**

Here an example for an update from release 3.7.5 to 3.8.0 with a MySQL database server. In file `Torque.properties` we

find the combination of `trackp/tissi` for the database user and password. The database name in the same file we can find as part of the JDBC-URL; let us assume it is called „track“. Let us further assume you have downloaded the actual database package into directory „tmp“:

```
mysqldump -uroot -p<your password> track > track370.sql

mysql -utrackp -ptissi -e "source /tmp/dbase/MySQL/migrate370To380.sql" track
```

The first line create a database dump of your current database, just for backup purposes. The second line runs the database upgrade script.

Descriptions for other database systems you can find in the installation manual.

### Application Upgrade

The upgrade procedure for the application depends on your type of application server and your operating system. It is basically equivalent to the installation procedure. The installation manual gives you hints for a number of the most popular web servers. Here we illustrate as an example the general procedure for an Apache Tomcat web server on a Debian Linux system:

1. Log in to your Linux system as super user (root) (or use sudo in the following commands).
2. Make sure you have Java JDK 1.5 or 1.6 installed and active, i.e. Tomcat uses that JDK. Don't use any Java packages from GNU, they will give problems.
3. Stop the web server with „`etc/init.d/tomcat5.5 stop`“.
4. Make a backup of file `Torque.properties`. You can find it under `/var/lib/tomcat5.5/webapps/track/WEB-INF`.
5. Make a backup of all resource files you have changed. The resource files you can find at `/var/lib/tomcat5.5/webapps/track/WEB-INF/classes/resources`. If you have not changed these files, you don't need to back them up.
6. Move your old application to some safe place, for example with „`mv /var/lib/tomcat5.5/webapps/track /tmp/track-350-save`“.
7. Overwrite the old file `track.war` in directory `/var/lib/tomcat5.5/webapps` with the new, most actual file (e.g. `track-380.war`).

8. Briefly start the Tomcat server with „`/etc/init.d/tomcat5.5 start`“. After one or two minutes stop it again with „`/etc/init.d/tomcat5.5 stop`“.
9. Now overwrite file `Torque.properties` in directory `/var/lib/tomcat5.5/webapps/track/WEB-INF` with the file you have saved under 4).
10. Again start the Tomcat server with „`/etc/init.d/tomcat5.5 start`“. After one or two minutes the application should be ready to use.

### Upgrade with Installer

If you have a Track+ installation that was created by a previous installer, you can easily upgrade to the new version using the new installer. **However, changes made in the webapps directory will be removed.** This pertains particularly to any localizations that you may have added.

The installer copies the existing installation into the Track+ installation directory, the place where usually your database files reside. The database file is backed up before being upgraded. It is therefore with some manual intervention possible to switch back to the previous version.

If you want to force the installer to also upgrade the Tomcat version, you can remove Tomcat after you have run the install, and then run the installer again. For the Tomcat version 6.0 that

comes with the installer you need a Java run time environment version 1.5 (5.0). Note that with Tomcat 5.5 only a JRE is required, not the larger JDK anymore.

Note: the original export templates are not replaced by an upgrade by new ones. This is to not accidentally overwrite your modifications. If you want to upgrade the standard report templates you have to do so manually.

### Additional Hints for Upgrading from Very Old Releases

When upgrading from releases 2.x you need to change the upgrade procedure slightly from the description above:

1. Do not copy the original `Torque.properties` to your new installation, since its structure has changed. Instead, note down the user name, password, and JDBC URL and edit these parameters in the new `Torque.properties` file.
2. Make a copy of the old `web.xml` file. It contains some configuration parameters you need to enter in the setup screen of your new installation.
3. After you have configured the application, and in particular the attachment directory in your new installation, copy all attachments from your 2.x release to the newly configured attachment directory.