



i-net
Clear Reports
2017

Migration Guide

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1 Migration to version 17

1.1 Content

The following chapters describes the various things to know when migrating from version 15.x of i-net Clear Reports to version 16.x. If you migrate from older versions of i-net Clear Reports then you should also read the other migration information depending on the version that you migrate from.

1.2 Java 8 required

The i-net Designer and the i-net Clear Reports server now requires Java 8 as minimum version of the Java virtual machine. The i-net Clear Reports viewer requires Java 7.

1.3 64bit Java VM embedded

The report server use a 64bit Java VM. As the 32 bit and 64 bit preferences on Windows are stored on different locations it may be necessary to export the configuration using the older i-net Clear Reports version and import it using i-net Clear Reports version 16.

2 Migration to version 16

2.1 Content

The following chapters describe the various things to know when migrating from version 16.x of i-net Clear Reports to version 17.x. If you migrate from older versions of i-net Clear Reports, then you should also read the other migration information depending on the version that you migrate from.

2.2 Migration of Scheduler Jobs

Every Scheduler task since version 12 will be migrated to the Task Planner in the setup when updating a system that used the previous Scheduler.

Migrating tasks from the Scheduler to the Task Planner

- Make sure that the plugin **Task Planner - Render Reports** is activated
- Make sure **all** tasks of **all** users are deleted from the Task Planner. Migration only occurs if the Task Planner is empty.
- Restart your server. In the initialization phase it will now migrate the tasks silently.
- If it does not migrate and no message about migration appears in the log file, then make sure that the old scheduler tasks are still available. Here is how:
 - Add the old Scheduler plugin to your installation, restart server
 - Activate the Scheduler plugin, restart server
 - Open the Scheduler. It should show your tasks. If not, then you are probably using a different configuration than before. Ask our support for help.

2.2.1 Migration issues

When tasks are migrated from Scheduler to Task Planner, some minor issues may arise, since many things have been streamlined

and simplified. See the following hints.

2.2.1.1 Reports

- The setting `as file:` was removed, which gave each generated report a different name. Now the name of the generated file(s) come from the title configured in the report template (*.rpt). However, the *File System Action* has an option *File Name Format* which allows you to construct a unique name.

2.2.1.2 Action settings

- For *Save (on servers file system)* the settings *Attach date* and *Attach time* was combined into the option *File Name Format*.
- For *Send via Email*, the CC and BCC options were removed, and values from CC are added as normal receivers. The options *Put reports in a zip file*, *Attach date* and *Attach time* were removed.
- For *Print (at server-known printer)* the option *Count of Copies* was removed, it always prints once. Other even older options like *orientation* and *quality* which were only available via Java API were also removed.

2.2.1.3 Time settings

There are some rare combinations of settings which were possible with the old Scheduler but are no longer possible with the Task Planner. It is possible some of the more exotic settings will get a slightly different behavior in the Task Planner.

- Daily execution with a `DayStepSize` greater than 1, which means execute every N days. In the scheduler this adds N days from the start date for each next execution. After conversion to Task Planner this always starts at the 1st of month and then adds N days for each next execution. If the `DayStepSize` is 7 then it will convert to a weekly interval.
- Weekly execution with a `WeekStepSize` greater than 1, which means every N weeks. If it is 2 then a *Two Weeks* interval will be used. Other values are not supported in the Task Planner and when converting this it will set the `WeekStepSize` to 1.
- Monthly execution with a `MonthStepSize` greater than 1, which means

every N months. In the scheduler this adds N months to the start date for each next execution. This can only be represented with a Cron Trigger. The Cron starts at a given month and then adds N months for the next execution. When converting such tasks it will determine the start-month automatically in order to match the correct interval. This only works if the `MonthStepSize` is 2, 3, 4, 6 or 12. For other values it will be every N months, but the execution month will likely be wrong.

- Yearly execution with a `YearStepSize` greater than 1, which means every N years. This is not supported in the Task Planner and when converting this it will set the `YearStepSize` to 1.
- Delete this task after Execution: This feature is not available in the Task Planner.
- Multiple executions on same day: one Time or Cron-Trigger does not support this, but you can add multiple triggers to the same task. When those tasks are migrated it will create many triggers automatically.
- End execution after N executions or after a given Date: this feature is not available in the Task Planner. When converting expired tasks they will be deactivated.

2.2.1.4 Custom Actions

Old custom actions will not work after migrating to the Task Planner. Those actions must be replaced with custom [Jobs](#) and/or [Actions](#). See the programming samples for how to implement your own Job or Action.

2.2.1.5 Dynamic Properties

Old dynamic properties classes will not work after migration to Task Planner. If you loaded your dynamic values from a Database then you can probably replace your custom dynamic properties with a [Database Series](#). For other cases it should be replaced with a custom Series implementation. See the programming samples for how to implement your own Series type.

2.2.1.6 Task owner

In Task Planner, each task always must have an owner, so a task belongs to a user. Migrated tasks will have Scheduler as owner. Because certain triggers, jobs and result handlers require certain permissions the artificial user Scheduler gets some permissions automatically if you have System Permissions enabled. If you remove the permissions it can happen that tasks can no longer be executed.

If you want to move the tasks to another user then you must duplicate a task and then delete the old one. The new task will belong to the currently logged in user.

3 Migration to version 15

3.1 Content

The following chapters describes the various things to know when migrating from version 14.x of i-net Clear Reports to version 15.x. If you migrate from older versions of i-net Clear Reports then you should also read the other migration information depending on the version that you migrate from.

3.2 WebServer plugin

The i-net Clear Reports web server was moved into a plug-in. Since plug-ins will be initialized automatically, the web server will start automatically, for example if the API was used. You need to remove the webserver plug-in if you embedd i-net Clear Reports instead of using it as report server.

3.3 64bit Java VM embedded on Windows

The setup and report server on Windows use a 64bit Java VM to install and use i-net Clear Reports. As the 32 bit and 64 bit preferences on Windows are stored on different locations it may be necessary to export the configuration using the older i-net Clear Reports version and import it using version 15.

3.4 Plugins

In the configuration manager dialog "Plugins" it is now possible to activate/deactivate plugins to extend or restrict the functionality of i-net Clear Reports. Some plugins are deactivated by default, e.g. Statistics and Scheduler.

4 Migration to version 14

4.1 Content

The following chapters describes the various things to know when migrating from version 13.x of i-net Clear Reports to version 14.x. If you migrate from older versions of i-net Clear Reports then you should also read the migration information depending on the version that you migrate from.

4.2 i-net Clear Reports consists of plugins

With version 14 we are introduced the concept of plugins to i-net Clear Reports. This removes a large amount of libraries from the installation and adds a single zip file per feature. This makes it much easier to say which library is required for a specific feature, this also avoids ClassNotFoundExceptions which could occur when removing libraries for features you didn't need.

4.2.1 Loading

Every plugin is a single zip file. All plugins are located in a folder named "plugins". On server start this directory is scanned and a plugin dependency hierarchy is created. All plugins with unresolved dependencies will be disabled. Now the start classes of all valid plugins are instantiated and the extensions for the core or other plugins are registered. The last step is the initialization of all valid plugins. To check which plugins were successfully loaded, activate the logging of i-net Clear Reports and set the log level to at least INFO.

4.2.2 Architecture

A plugin is a zip file. It contains at least the files "plugin.properties" and "server.jar". The plugin.properties defines the start class which implements the interface com.inet.plugin.ServerPlugin. Further properties of the plugin are defined by annotations of the start class. These annotations cover the id of the plugin, its dependencies and the plugin version. For further details refer to the Server Programming Guide.

4.3 Scheduler - Custom Actions / Dynamic Properties

If you are using a custom scheduler action and/or dynamic properties, it is necessary to write a plugin for this action and/or dynamic property class. Registering custom actions or dynamic properties to the scheduler does no longer work by adding a jar-file to the lib path. For more information please refer to the samples in the i-net Clear Reports installation directory.

4.4 API Changes

- The following constructors of the class **com.inet.report.Listener** have been **removed**:
 - Listener(int port, boolean throwException)
 - Listener(boolean standalone, int port, boolean throwException)
- The other constructors of class **com.inet.report.Listener** are new throwing an IOException in case of IO error.
- The following interfaces and classes were **moved** from package **com.inet.report.config** to **com.inet.config**:
 - Configuration
 - ConfigurationChangeListener
 - ConfigurationChangeEvent
 - ConfigurationManager
- The following interfaces and classes were **added**:
 - com.inet.authentication
 - UsersAndGroupsProvider

- com.inet.problemfinder.rules
 - ProblemFinderRule
 - AbstractRuleElement
 - AbstractRuleField
 - AbstractRulePropertyFormula
 - AbstractRuleSection
- com.inet.plugin
 - ServerPlugin
 - ServerPluginManager
- com.inet.report
 - ListenerSettings
- Removed deprecated API:
 - com.inet.report.ReportProperties
 - getLabelFormat()
 - setLabelFormat(String s)
 - com.inet.report.ValueProperties
 - getBooleanFormatTypeFormula()
 - com.inet.report.AbstractValueElement
 - getBooleanFormatTypeFormula()
 - com.inet.report.chart.plot.BarPlot
 - DEFAULT_BAR_MARGIN_PERCENT
 - getBarMarginPercent()
 - setBarMarginPercent(double barMarginPercent)

4.5 Email settings

The email settings in the configuration moved from the category "Scheduler" into the new category "Email Settings" because they are used by "Error Notifications" as well.

4.6 Support Email Address

It is now possible to display a link with a support email address in the error dialog of HTML and Java report viewer. You can configure it in the configuration manager category "Email settings". The default value is "clearreports@inetsoftware.de".

4.7 Error notifications

It is now possible to send an email notification in case of an error. In the new plugin "Error Notifications" you can set an email address to which all error notifications will be send.