

**APIS CARM NG**  
**Quick Start Guide for MS Windows**

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## ***Installation***

### **Java base components**

At first the Java base system (JDK) version 6.0 has to be installed. You can find a suitable installation archive within the folder "Java" of the installation medium. Execute the installation according to the statements of this installation archive. Please note, that a Java runtime environment (JRE) is not sufficient for the operation of the APIS CARM NG. Previous versions of JDK or JRE on your computer should be uninstalled, before the installation of the JDK version 6.0.

### **Database**

For the data storage of the APIS CARM NG a relational database system is used (RDBMS). You can find a suitable system in the folder "DB\MySQL" of the installation medium. For a simple administration of the database system, apart from the actual database server (mysql-5.x.xx-win32.msi), also the administration interface (mysql-gui-tools-5.x-win32.msi) should be installed.

### **Application Server**

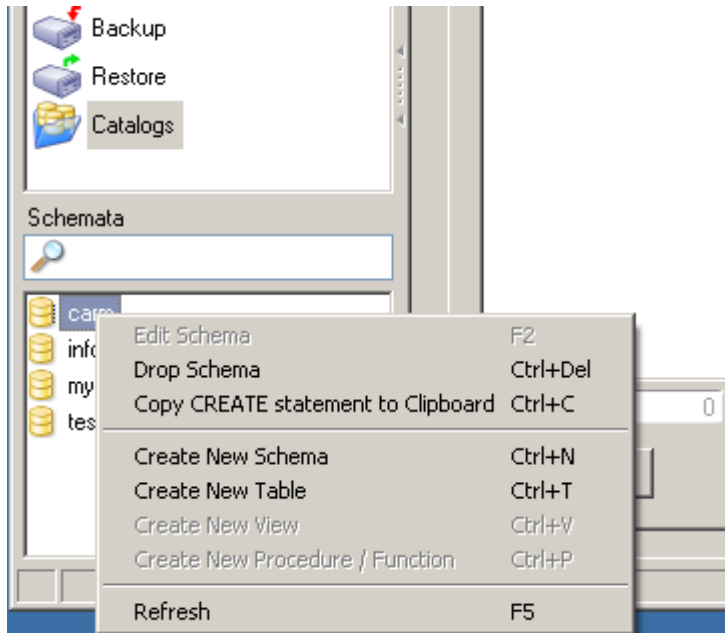
A Java EE 5 compliant application server is included in the folder "AppServer" of the installation medium. Execute the installation according to the statements of the installation routine. For the path of the Java 2 SDK storing path, please choose the version of the JDK that you have been installing beforehand. If you would like an automatic start of the APIS CARM NG server, you can let this installation routine set up a Windows service.

You have now successfully installed all required base components.

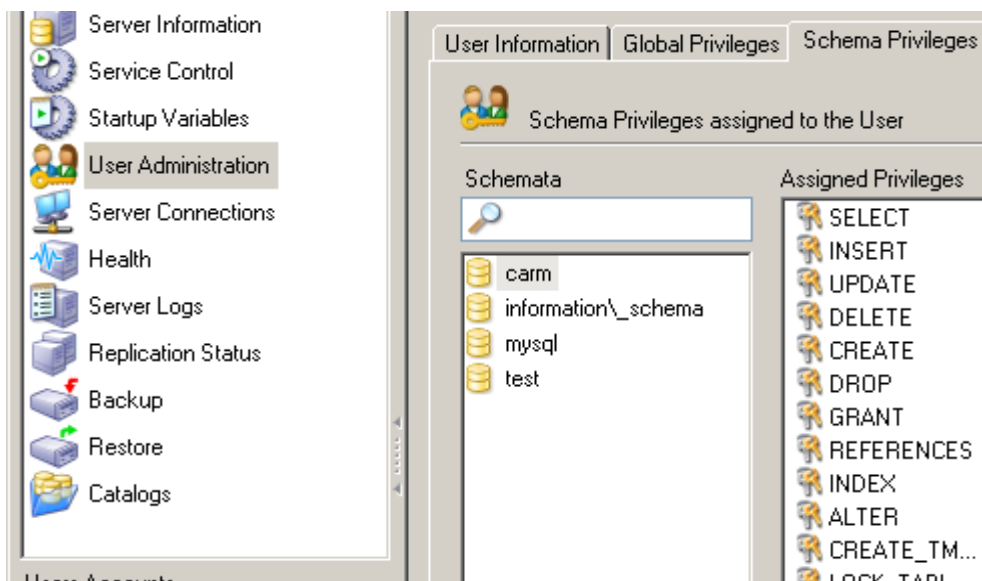
## Configuration

### Database

After successfully starting the MySQL database system, you can configure the database. If necessary, check whether the database server is available, with using the services management of the operating system. First start the administration interface "MySQL Administrator" and log in at the database system as user "root". Then create a new database, e.g. "carm" via the menu entry "Create New Schema" of the entry "Catalogs".



After that, you should create a new user via the entry "User Administration" and assign him all rights on the tab "Schema Privileges".



## Application Server

To enable the APIS CARM NG to access the database server, the database driver has to be installed. To do this, copy the JDBC driver file (mysql-connector-java-5.x.x-bin.jar) from the folder "DB\MySQL\MySQL Connector" of the installation medium into the "Lib" folder of the application server installation (e.g. "C:\Sun\AppServer\lib") and the restart the application server. If you created a Windows Service for the application server you can use the services manager of the operating system as an alternative (Control Panel-> Administrative Tools → Services). Otherwise you can simply use the corresponding entries in the Windows Start menu ("Stop standard server" / "Start standard server"). All further configuration steps are made in the "Admin Console" of the application server. Open it via the corresponding entry in the Start menu. After the log in with the access data that you established during the installation, you can find detailed descriptions of functions and configuration of the application server on the page "Common Tasks" under the point "Documentation". Create a new connection pool with the button "New" under the point "Resources > JDBC > Connection Pools".

Resources > JDBC > Connection Pools

### Connection Pools

To store, organize, and retrieve data, most applications use relational databases. J2EE application can access a database, it must get a connection.

Pools (4)

|

	JNDI Name	Resource Type	Datasource Classn
<input type="checkbox"/>	__CallFlowPool	javax.sql.XADataSource	org.apache.derby.jdbc

Create a connection pool "MySQLPool".

Resources > JDBC > Connection Pools

### New JDBC Connection Pool (Step 1 of 2)

Identify the general settings for the connection pool.

**General Settings**

Name: \*

Resource Type:    
Must be specified if the datasource class implements more than 1 of the interface.

Database Vendor:

In „Step 2 of 2“ the login data for the database server have to be inserted.

Additional Properties (3)	
Name	Value
<input type="checkbox"/> User	carm
<input type="checkbox"/> Password	carm
<input type="checkbox"/> URL	jdbc:mysql://localhost:3306/carm

Fill in the fields "User" and "Password" in the table "Additional Properties". The fields "URL" and "Url" still need to be assigned to the right JDBC-URL. Use the following scheme to do this "jdbc:mysql://<Server>:3306/<Database>", e.g. "jdbc:mysql://localhost:3306/carm". Complete the configuration with the button "Finish".

Now create a new JDBC-Resource with the name "jdbc/carmDB", clicking the button "New" under the point "Resources > JDBC > JDBC-Resource".

Resources > JDBC > JDBC Resources

### New JDBC Resource

Specify a unique JNDI name that identifies the JDBC resource you want to create. Name must contain only alphanumeric,

JNDI Name: \*

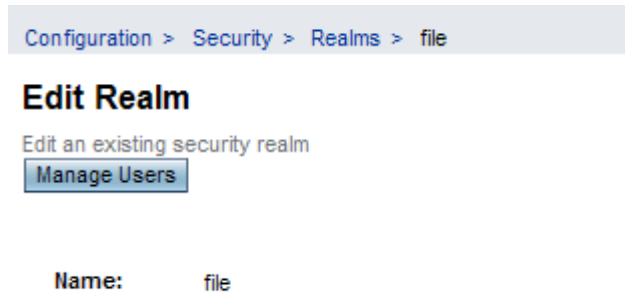
Pool Name: \*    
 Use the [JDBC Connection Pools](#) page to create new pools

Description:

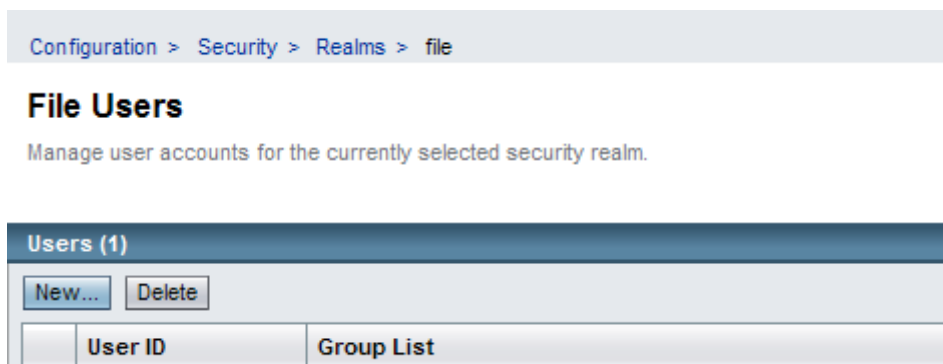
Status:  Enabled

You now successfully established connection to the database system.

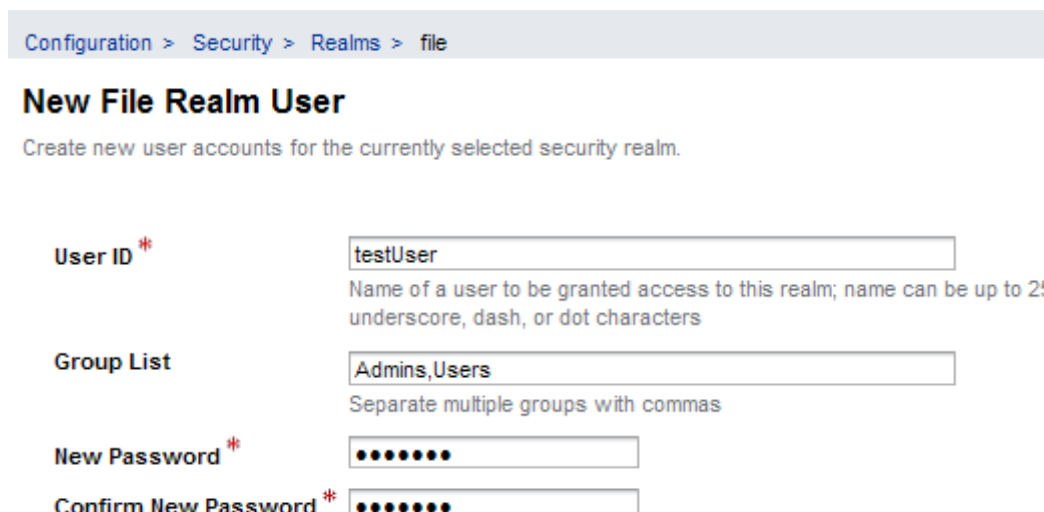
To enable users to access the APIS CARM NG Server, it is necessary to make security settings on the application server. First you should acquaint yourself with the basic security settings. You can find a description for this in the documentation of the application server. You can also find advanced topics there, like e.g. the use of LDAP as log in area (LDAP-Realm). In simple cases you can also use the file-based user administration. Click the button "Manage User" under the point "Configuration > Security > Realms > file" to access the user management.



Then use the button "New" to create a new user.



Then assign the user a password and a group membership.

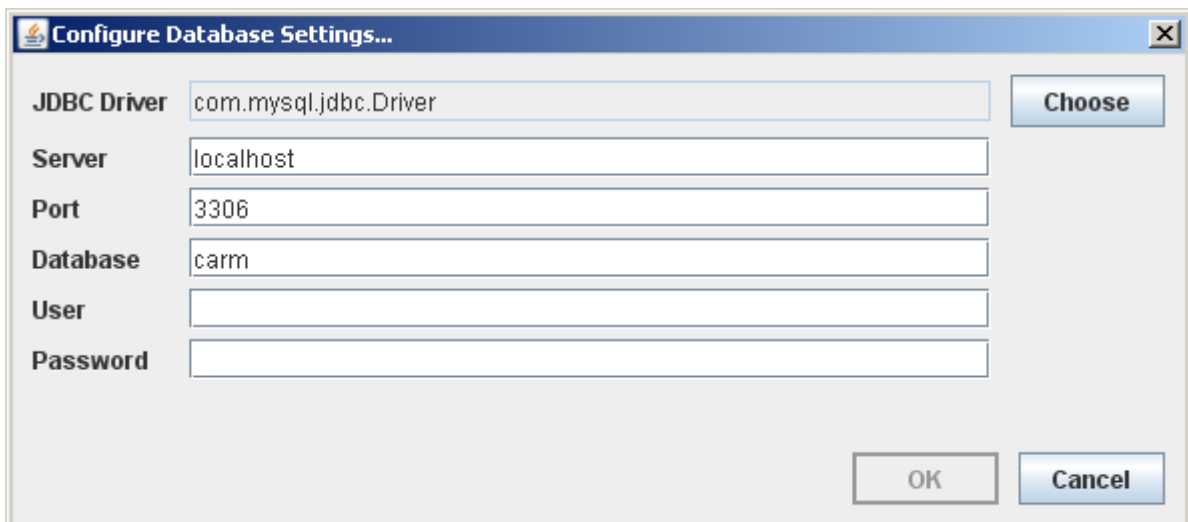


## APIS CARM NG Application module

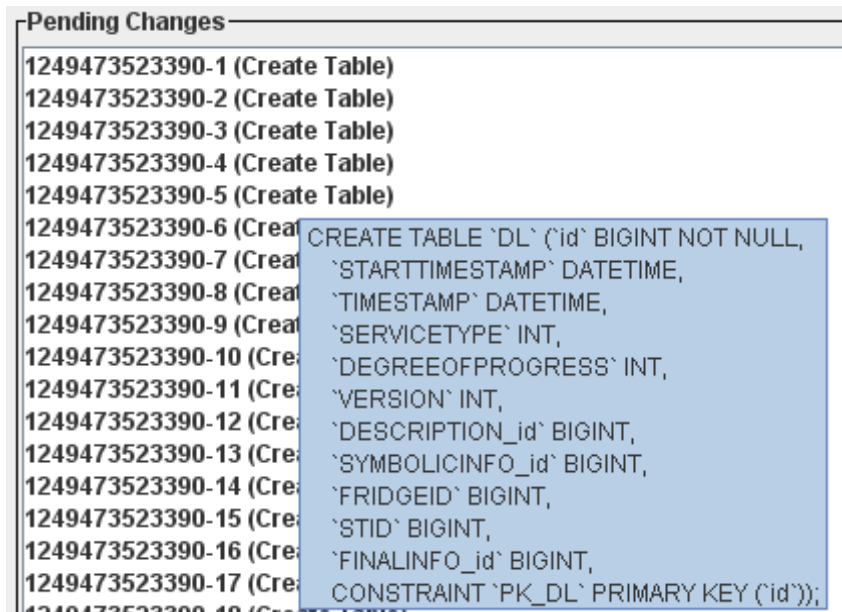
Before the deployment of the APIS CARM NG application module several configuration steps have to be executed. To do this, copy the content from the folder "APIS CARM NG" of the installation medium into a folder on your local system or network, where you have writing access (deployment folder). With the database update wizard you can create or update the structure of the database (tables). Start the wizard in the folder "APIS CARM NG\DataMigrationWizard", which you copied from the installation medium by double click on the file "DataMigrationWizard.jar". Use the button "Choose CARM NG Application" to select the file "carm.ear" from the deployment folder, that you created before.



Clicking the button "Configure database settings" leads you to the dialog where the database can be selected. First choose the JDBC driver file via the button "Choose". This resides in the folder "DB\MySQL\MySQL Connector" of the installation medium. Then fill in all other fields of the dialog and confirm your entries with "OK". The wizard checks automatically, whether your settings are correct and stores them for further use in the file "dbwizard.cfg" in the program directory of the wizard.

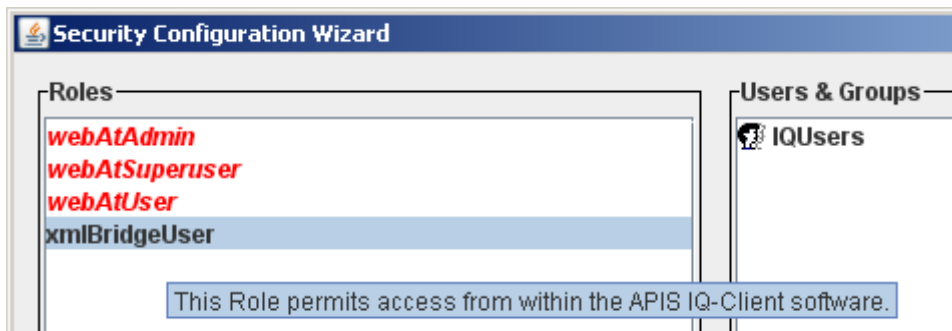


Now you see the pending changes in the overview. Confirm the changes with the button "Update".



After a successful update of the database structure no pending changes are displayed anymore and you can leave the wizard.

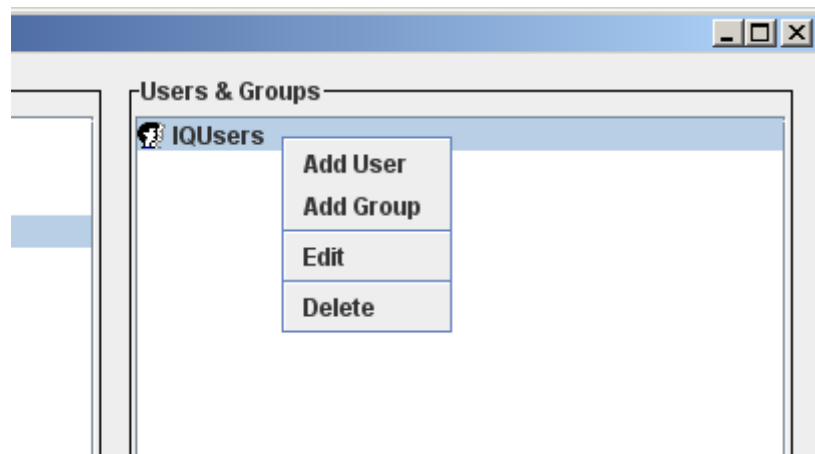
With the wizard for security settings you can now make the concluding assignment of the roles to users or user groups. To do this, start the wizard in the folder "APIS CARM NG\SecurityConfigWizard" with double click on the file "SecurityConfigWizard.jar". After opening the file "carm.ear" from the deployment folder with the button "Load", the available roles are displayed. Roles, which do not have any assignments to users or user groups yet, are marked in red there.



The APIS CARM NG application module uses the following roles:

- webAtAdmin: All users, who have administrative access via web interface to the service Action-Tracking on the server.
- webAtSuperuser: All users, who have full access to the data of the Action-Tracking service via web interface.
- webAtUser: All users, who have only access to their own data of the Action-Tracking service via web interface.
- xmlBridgeUser: All users, who get access to the CARM NG Server via the IQ-Client software.
- FitWsUser: All users, who get access to „CSS Functional Safety“ to calculate failure rates via the IQ-Client software.
- FitWsAdmin: All users, who get access to „CSS Functional Safety“ to modify the method of calculation via the IQ-Client software.

Now perform the assignment to the users or user groups via the context menu in the area "Users & Groups" and store the settings in the file "carm.ear" in the deployment folder with the button "Save".

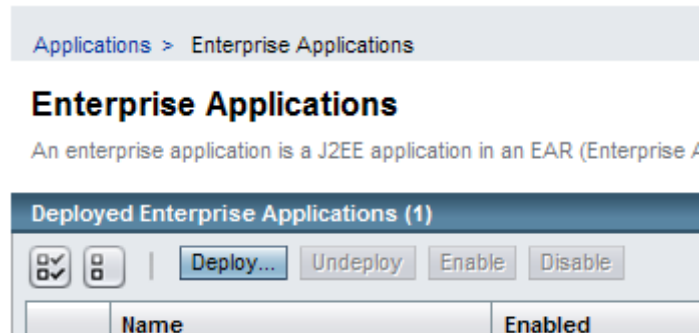


You now have prepared the APIS CARM NG application module for deployment.

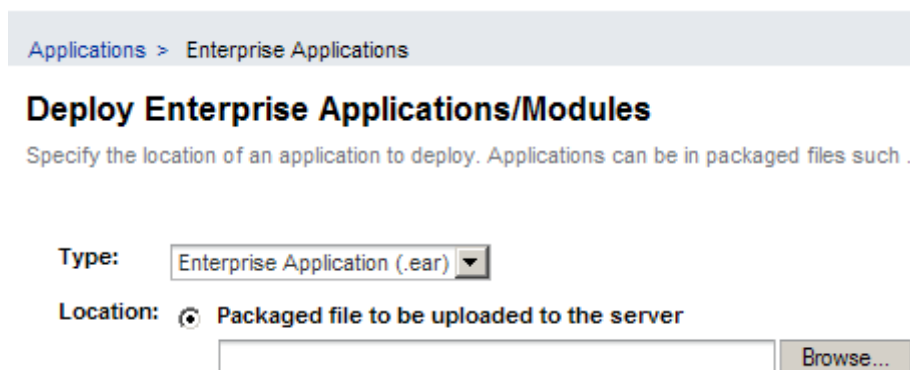
## Deployment of the APIS CARM NG application module

### Deploy module

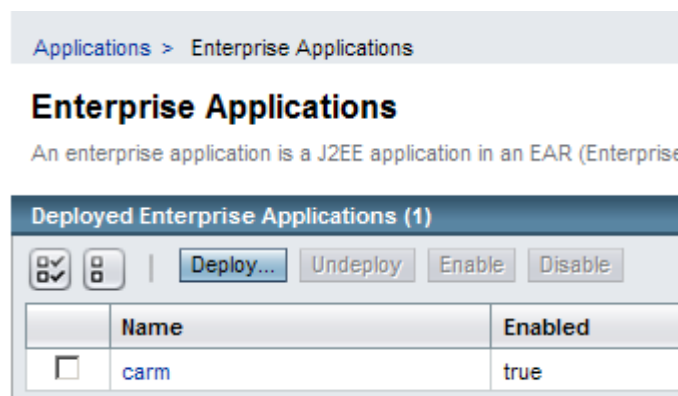
The application module can be deployed via the "admin console" of the application server. Log in at the "admin console" and start the deployment procedure by clicking the button "Deploy" under the point "Applications > Enterprise Applications".



Now select the file "carm.ear" that you prepared in the deployment folder as "packaged file to be uploaded to the server" and confirm your choice with the button "OK".

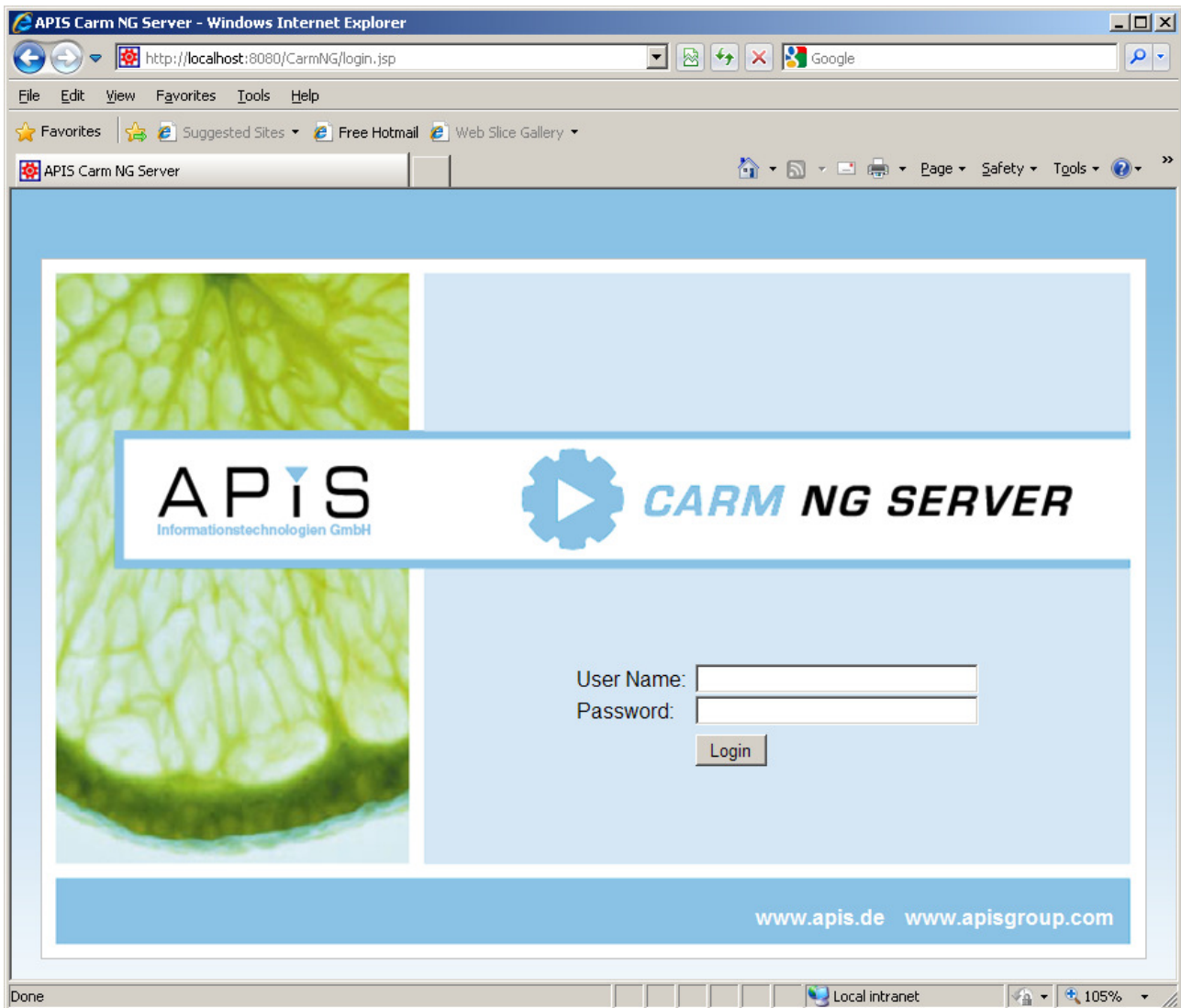


After successful deployment the APIS CARM NG application module is listed under the name "carm".



## Verify deployment

Messages for the deployment and for the operation of the APIS CARM NG Server can be found in the file "server.log". This file resides in the folder "domains\domain1\logs" of the application server installation, e.g. "C:\Sun\AppServer\domains\domain1\logs". To check whether the deployment was successful, you can open the log in interface of the APIS CARM NG Server. To do this, go to the URL of the web interface of the APIS CARM NG Server with a web browser. You can find that under "". With standard settings, that is e.g. "http://localhost:8080/CarmNG".



You now successfully deployed the APIS CARM NG application module.

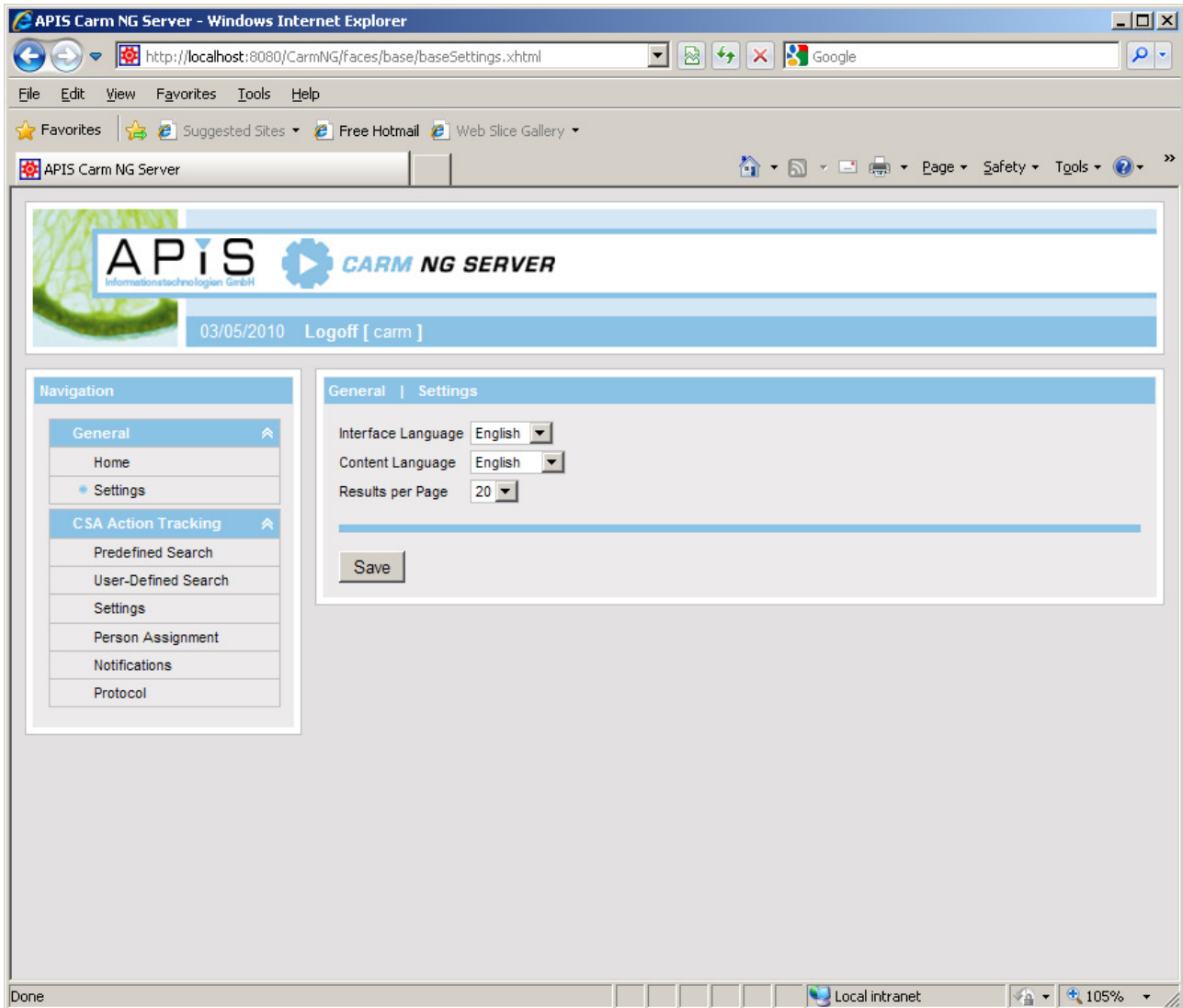
## First steps with the APIS CARM NG Server

### Log in

The log in is carried out in the web interface with user name and password. As source for the authentication every log in domain (Realm) supported by the application server can be used. Further information on this can be found in the documentation of the application server.

### General Settings

Settings that refer to the whole APIS CARM NG Server, can be found in the navigation under "General > Settings". The settings that have to be made there, are stored user related.



The screenshot shows a Windows Internet Explorer browser window displaying the APIS CARM NG Server web interface. The address bar shows the URL: `http://localhost:8080/CarmNG/faces/base/baseSettings.xhtml`. The page title is "APIS CARM NG Server". The interface features a navigation menu on the left with the following items: General, Home, Settings (selected), CSA Action Tracking, Predefined Search, User-Defined Search, Settings, Person Assignment, Notifications, and Protocol. The main content area is titled "General | Settings" and contains the following configuration options:

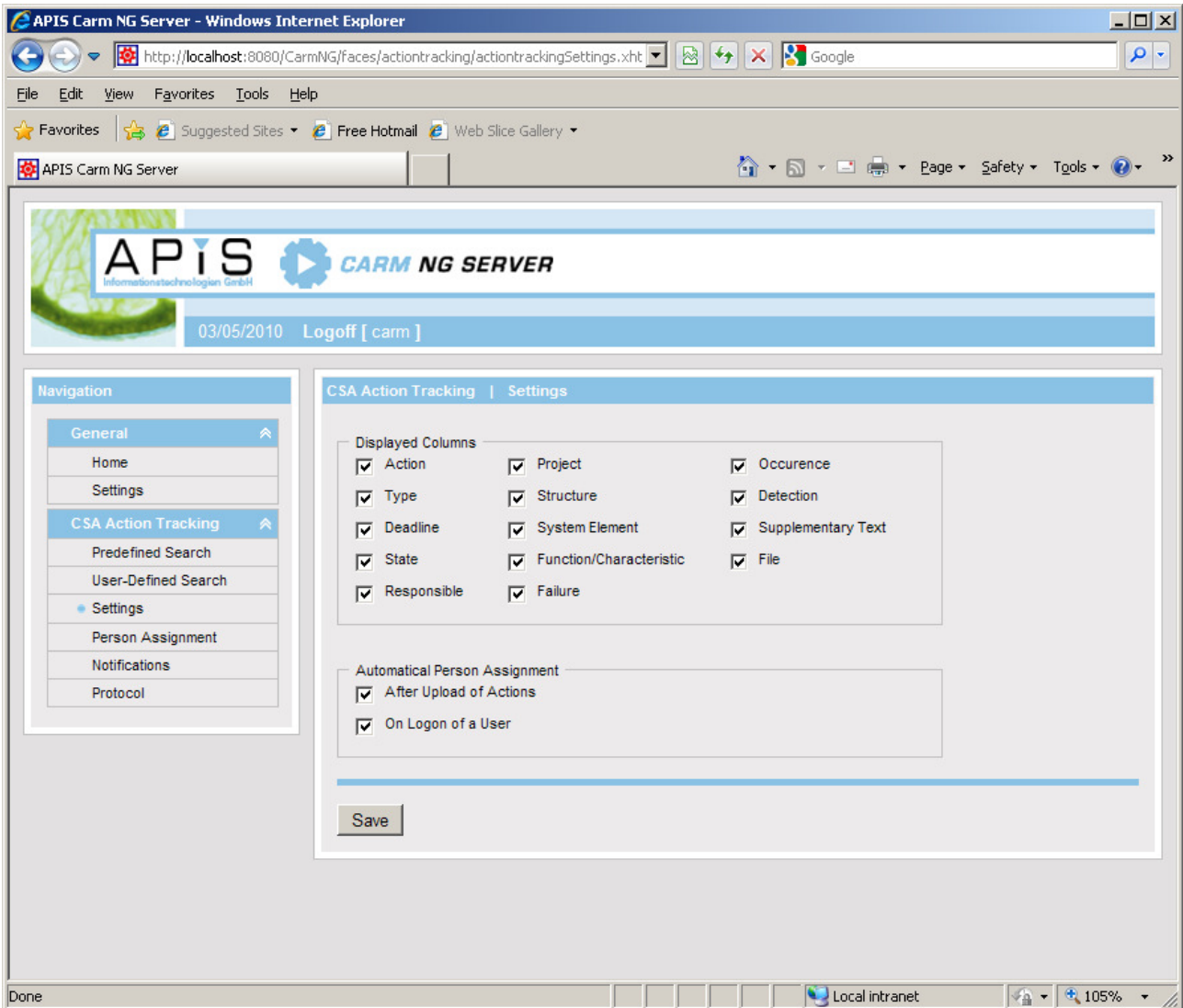
- Interface Language: English
- Content Language: English
- Results per Page: 20

A "Save" button is located at the bottom of the settings area. The status bar at the bottom of the browser window shows "Done", "Local intranet", and a zoom level of 105%.

# CSA Action Tracking

## Settings

Settings for this service can be made under "CSA Action Tracking > Settings". They can be stored separately for each user. For security reasons, certain options can only be selected from users with the role "webAtAdmin". This includes e.g. options, which affect the automatic user assignment.



## Person assignment

If no automatic person assignment according to the APIS IQ-Client field "user" in the administration for persons and teams shall be made, an assignment can be made with users of the role "webAtAdmin".

## Notifications

If the responsible person shall be notified per E-Mail automatically, the necessary settings can be made under "CSA Action Tracking > Notifications". Modifications can only be made by users with the role "webAtAdmin".

The screenshot displays the APIS Carm NG Server web application interface within a Windows Internet Explorer browser window. The browser's address bar shows the URL: `http://localhost:8080/CarmNG/faces/actiontracking/emailNotification.xhtml`. The application header includes the APIS logo (Informationstechnologien GmbH) and the text "CARM NG SERVER". The current date is 03/05/2010, and the user is logged off as "carm".

The main content area is titled "CSA Action Tracking | Notifications" and contains the following settings:

- Generally:** A checkbox for "Notify Responsible Persons" is unchecked. A spinner control is set to "7" with the label "Days Before Deadline".
- Notification:** "Language" and "Content Language" are both set to "English" via dropdown menus.
- SMTP Settings:** Fields for "Server", "Port", "Sender E-Mail Address", "User Name", and "Password" are present. A checkbox for "Server Needs Authentication" is unchecked. A "Test Notification to Receiver" field and a "Send!" button are also visible.

A "Save" button is located at the bottom of the settings area. The browser's status bar at the bottom shows "Done" and "Local intranet".

## Protocol

Changes of important settings are logged in a protocol. So it is traceable at any time, which changes have been made by which user.

The screenshot displays the APIS CARM NG SERVER web application in a Windows Internet Explorer browser window. The address bar shows the URL: `http://localhost:8080/CarmNG/faces/actiontracking/protocol.xhtml`. The browser's menu bar includes File, Edit, View, Favorites, Tools, and Help. The page header features the APIS logo (Informationstechnologien GmbH) and the CARM NG SERVER logo. Below the header, the date 03/05/2010 and a Logoff [carm] link are visible. The main content area is titled "CSA Action Tracking | Protocol" and contains a "Protocol Entries" search form with the following fields: "From" (19/04/2010), "To" (03/05/2010), "User" (Not Specified), and "Category" (Not Specified). A "Start Search" button is located below the form. A navigation sidebar on the left lists menu items: General (Home, Settings), CSA Action Tracking (Predefined Search, User-Defined Search, Settings, Person Assignment, Notifications, Protocol), and Protocol. The browser's status bar at the bottom indicates "Local intranet" and a zoom level of 105%.