

Kerberos Supplement

Version 9.0, 9.5, 9.6, 9.7

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This document applies to webMethods Product Suite Version 9.0, 9.5, 9.6, 9.7 and to all subsequent releases.

Specifications contained herein are subject to change and these changes will be reported in subsequent release notes or new editions.

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Using Kerberos with webMethods Products

■ Using Kerberos with webMethods Products	3
■ Install the webMethods Products	3
■ Configure the krb5.conf and JDBCDriverLogin.conf Files	4
■ Create the webMethods Database Components	5
■ Configure the Products to Use Kerberos	5
■ Configure the webMethods JDBC Adapter to Use Kerberos	6

Using Kerberos with webMethods Products

This supplement explains how to install and configure webMethods products to use Kerberos authentication when connecting to webMethods database components. The webMethods products covered in this document are the 9.0, 9.5, 9.6, and 9.7 releases of webMethods Integration Server, My webMethods Server, and webMethods Optimize.

This supplement assumes the following:

- You have a thorough understanding of Kerberos and of DataDirect drivers.
- You have given the webMethods products and the webMethods Database Component Configurator access to the Kerberos ticket-granting ticket (TGT) session keys.
- You have set up your RDBMS to support Kerberos authentication.
- The user that is going to connect to the RDBMS has full permissions to the RDBMS.

Install the webMethods Products

For complete instructions on the steps below, see *Using the Software AG Installer* and the appropriate release of *Installing webMethods Products*.

1. Start the Software AG Installer.
2. On the product selection tree, select Integration Server, My webMethods Server, Optimize Analytic Engine, or a combination of these products, depending on which products you have licensed. Also install the webMethods Database Component Configurator.
3. On the Integration Server configuration panel, supply the license file and port. If installing on Windows, install as service. Select **External RDBMS**, select the RDBMS you are using, and provide a connection name. Specify the URL and include the option `Authenticate=kerberos`. For 9.0, supply any database user and password.

For 9.5, 9.6, or 9.7, leave the **Database user** and **Password** fields blank; when the installer warns that you have not provided database information, choose to continue without it.

Note: For Kerberos authentication, user name and password are not required because Kerberos takes them from the user that is running the product. The DataDirect driver tries to use Kerberos authentication when the database URL contains the `Authenticate=kerberos` option and the values for database user and password are blank. However, for 9.0, you must specify a dummy user name and password on this configuration panel, or the installer will use the embedded database. You will remove the dummy user name and password later in this procedure.

4. On the My webMethods Server configuration panel, supply the port. If installing on Windows, install as service. Select **External RDBMS** and select the RDBMS you are using. Specify the URL and include the option `Authenticate=kerberos`. For 9.0, supply any database user and password. For 9.5, 9.6, or 9.7, leave the **Database user** and **Password** fields blank; when the installer warns that you have not provided database information, choose to continue without it.

Note: See the note for the previous step.

5. On the Optimize configuration panel, supply the host or IP address and the port. If you are installing on a Windows system, choose to install engines as service.

Configure the krb5.conf and JDBCDriverLogin.conf Files

To use Kerberos authentication, you must create and configure the `krb5.conf` and `JDBCDriverLogin.conf` files. The `krb5.conf` file provides details about the Kerberos realm. The `JDBCDriverLogin.conf` file provides parameters to the Kerberos implementation within the Data Direct driver and tells the driver how to operate. This file is actually a JAAS file that configures the driver and its parameters.

1. Create the `krb5.conf` and `JDBCDriverLogin.conf` files and move them to the *Software AG_directory \common\lib\ext* directory.
2. Open the `krb5.conf` file in a text editor. For the Kerberos realm, on the `kdc` property, identify the machine that is acting as the Kerberos Distribution Center, or KDC. In addition, add the two lines below to the bottom of the file:

```
[appdefaults]
validate=false
```

3. Open the `JDBCDriverLogin.conf` file in a text editor and set the `JDBCDriverLogin.conf` file as shown below. For detailed information on the parameters in this file, see the Java document for the `Krb5LoginModule`.

```
JDBC_DRIVER_01 {
    com.sun.security.auth.module.Krb5LoginModule required debug=false
    client=true useTicketCache=true doNotPrompt=true;
};
```

Create the webMethods Database Components

1. For 9.0, go to the *Software AG_directory* \install\dbparams directory, open the dbparams.xml, clear the value from the `username` element, and save the file.
2. If you are using SQL Server as your RDBMS, do the following:
 - a. Configure the domain account that owns the SQL Server database to obtain/renew Kerberos ticket-granting ticket (TGT) session keys. To do so, go to the *Java_directory* \bin directory, run the command `kinit user@domain`, and provide the domain account's password when prompted.
 - b. Start the webMethods Database Component Configurator using the domain account. Click **Start > All Programs > Software AG > Tools** and shift-right-click **Database Component Configurator 9.0**. Click **Run as different user**
3. Start the Database Component Configurator.
4. The displayed URL should be the last URL you entered during product installation. Review the URL and make sure it includes the option `Authenticate=kerberos`.
5. Create the webMethods database components for your products. Do not enter a database user or password. For complete instructions on the steps below, see the appropriate release of *Installing webMethods Products*.

Configure the Products to Use Kerberos

1. If you are using SQL Server, open the Windows Services window. Find the service for each of your products; the service name format is *Software AG product 9.0*. On the Log On tab, change the account that runs the service to the domain account that owns the SQL Server database.
2. For 9.0, for Integration Server, go to the *Software AG_directory* \IntegrationServer\config\jdbc\pool directory and remove the dummy database user and password you entered during installation from all connection pool aliases in the Conn.xml and CentralUserPool.xml files. Then start Integration Server.
3. For My webMethods Server, do the following:
 - a. For 9.0, go to a *Software AG_directory* \MWS\server\server_instance\config directory, open the mws.db.xml file, and clear the USER and PASSWORD elements of the dummy values you entered during installation. Repeat this step for each My webMethods Server server instance.
 - b. Go to `http://My webMethods Server_host:8585`, log in as sysadmin, and make sure you can access My webMethods Server. Then restart My webMethods Server.
4. For Optimize, log on to My webMethods and use Central Configuration as usual to configure the Analytic Engine. When configuring the database pool, include the

`Authenticate=kerberos` option in the database URL. Deploy the configuration, then restart the Analytic Engine service.

Configure the webMethods JDBC Adapter to Use Kerberos

If you are using the webMethods JDBC adapter to connect to external RDBMSs, you can configure the adapter to use Kerberos for authentication.

1. Open Integration Server Administrator and go to the **Adapters > JDBC Adapters** page.
2. Choose to edit the connection for the adapter.
3. For 9.0, clear the **User ID** and **Password** fields, and add `integratedSecurity=true` to the **Other Properties** field.
4. For 9.0, if you want to use the `krb5.conf` and `JDBCDriverLogin.conf` files you configured in ["Configure the krb5.conf and JDBCDriverLogin.conf Files"](#) on page 4, specify the option `authenticationScheme=JavaKerberos` in the URL.
5. Save the settings.