

IBM Connections V4.5: How to configure SPNEGO

Visit [Enabling single sign-on for the Windows desktop](#) (also know as Enabling SPNEGO) in the information center to get more information about this topic.

Configure IBM® Connections to use SPNEGO for single sign-on (SSO). This configuration permits users to sign in to the Windows desktop and automatically authenticate with IBM Connections.

References

[Configuring SPNEGO on WebSphere Application Server](#)

[How to configure web browsers to support SPNEGO](#)

[Creating a redirect page for users without SPNEGO support](#)

[Filter criteria](#)

Requirements

An administrator for IBM Connections that meets the following criteria:

- is from the configured LDAP used in Connections and is populated into the profiles databases (PROFILEDB).

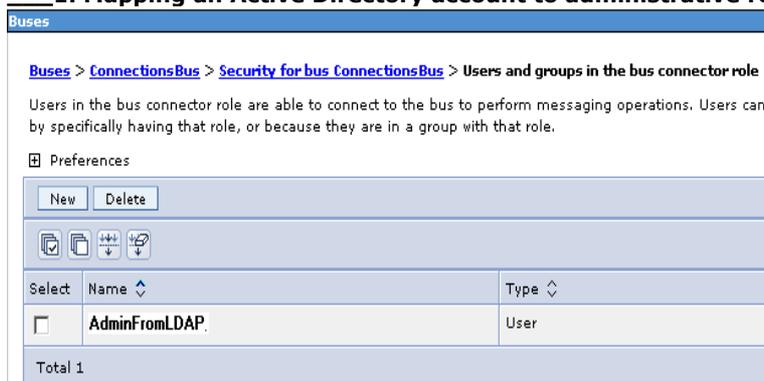
- is configured as an Administrator of the Deployment Manager.

- was used as the Connections administrator during the IBM Connections installation.

We refer to this user as: **AdminFromLDAP**.

Steps:

1. Mapping an Active Directory account to administrative roles. Change J2C authentication



Buses > ConnectionsBus > Security for bus ConnectionsBus > Users and groups in the bus connector role

Users in the bus connector role are able to connect to the bus to perform messaging operations. Users can be specifically having that role, or because they are in a group with that role.

Preferences

| Select | Name | Type |
|--------------------------|---------------|------|
| <input type="checkbox"/> | AdminFromLDAP | User |

Total 1

2. Creating a service principal name and keytab file

These steps were performed by the Active Directory Administrator who provided the following Keytab files for the IBM Connections Deployment Manager, Node1, and Node2.

___3. Merge all the keytab files to make the Deployment Manager aware of the SPNs for each node.

The following example demonstrates the procedure for merging keytab files.

a) Assuming that you have created the following keytab files:

http.keytab for the Deployment Manager

krb5Node1.keytab for Node 1

krb5Node2.keytab for Node 2

b) Run the **ktab** command as follows:

```
mkdir /opt/keytab
```

c) Copy the three keytab files into this directory: **/opt/keytab**

d) Merge the three keytab files as follows:

```
cd /opt/IBM/WebSphere/AppServer/java/jre/bin [Note: use this version of ktab and NOT the http version]  
./ktab -m /opt/keytab/krb5NodeA.keytab /opt/keytab/http.keytab  
./ktab -m /opt/keytab/krb5NodeB.keytab /opt/keytab/http.keytab
```

e) Verify all three system are displayed in the keytab file correctly

cat http.keytab and you should see something like this result:

```
cat http.keytab  
SPNEGO.COMPANY.COM HTTP!dm&ihs.spnego.company.com  
SPNEGO.COMPANY.COM HTTP!dm&ihs.spnego.company.com  
SPNEGO.COMPANY.COM HTTP!node1.spnego.company.com  
SPNEGO.COMPANY.COM HTTP!node2.spnego.company.com
```

___5. Create a Kerberos configuration file named **krb5.conf**

___a) Launch **wsadmin** and create the **krb5.conf** file as follows:

i. **cd /opt/IBM/WebSphere/AppServer/profiles/Dmgr01/bin**

ii. **./wsadmin.sh -lang jacl -user AdminFromLDAP -password password**

iii. At the prompt enter:

```
$AdminTask createKrbConfigFile {-krbPath /opt/IBM/WebSphere/AppServer/java/jre/lib/security/krb5.conf  
-realm SPNEGO.COMPANY.COM -kdcHost msad2008.spnego.company.com -dns spnego.company.com  
-keytabPath /opt/keytab/http.keytab}
```

___b) Copy the **krb5.conf** file to the **/opt/keytab** folder, which should also have the merged keytab file (krb5.keytab)

___c) Verify the contents of the **krb5.conf**:

```
cat krb5.conf  
[libdefaults]  
default_realm = SPNEGO.COMPANY.COM  
default_keytab_name = FILE:/opt/keytab/http.keytab  
default_tkt_enctypes = rc4-hmac des-cbc-md5  
default_tgs_enctypes = rc4-hmac des-cbc-md5  
forwardable = true  
renewable = true  
noaddresses = true  
clockskew = 300  
[realms]  
SPNEGO.COMPANY.COM = {  
kdc = msad2008.spnego.company.com:88  
default_domain = spnego.company.com  
}  
[domain_realm]  
.spnego.company.com = SPNEGO.COMPANY.COM
```

___d) Copy this folder and contents into the **same location** on the DM, Node1 & Node2 (ie **/opt/keytab** folder)

6. Creating a redirect page for users without SPNEGO support

Use the example provided in the information center: [Creating a redirect page for users without SPNEGO support](#)

7. Configuring SPNEGO on WebSphere Application Server

a. Log on to the WebSphere Application Server Integrated Solutions Console on the Deployment Manager and select Security -> Global Security.

b. In the Authentication area, click **Kerberos configuration** and then enter the following details

- Kerberos service name
HTTP
- Kerberos configuration file
Full path to your Kerberos configuration file
- Kerberos keytab file name
Full path to your keytab file
- Kerberos realm name
Name of your Kerberos realm
- Select **Trim Kerberos realm from principal name** if it is not already selected.
- select **Enable delegation of Kerberos credentials** if it is not already selected.

The settings should look like this:

Global security > Kerberos

When configured, Kerberos will be the primary authentication mechanism. Configure EJB authentication to resources by accessing the resource references link on the applications details panel.

| Kerberos Authentication Mechanism | Related Configuration |
|---|---|
| * Kerberos service name HTTP | ■ SPNEGO Web authentication |
| * Kerberos configuration file with full path /opt/keytab/krb5.conf <input type="button" value="Browse..."/> | ■ Federated user repositories |
| Kerberos keytab file name with full path /opt/keytab/http.keytab <input type="button" value="Browse..."/> | ■ CSIv2 inbound communications |
| Kerberos realm name SPNEGO.COMPANY.COM | ■ CSIv2 outbound communications |
| <input checked="" type="checkbox"/> Trim Kerberos realm from principal name | |
| <input checked="" type="checkbox"/> Enable delegation of Kerberos credentials | |
| <input type="button" value="Apply"/> <input type="button" value="OK"/> <input type="button" value="Reset"/> <input type="button" value="Cancel"/> | |

c. Select **OK**, then **Save**

___d. Click **Kerberos configuration** and in the Related Configuration area, click **SPNEGO Web authentication**.

Note: SPNEGO Web authentication and Kerberos authentication use the same Kerberos client configuration and keytab files.

___e. Specify the values for SPNEGO filter.

In the **SPNEGO Filters** area select **New** and enter the following details:

Host name - enter the host name of the deployment manager

Kerberos realm name - enter your Kerberos realm name

Filter criteria - check the information center for any updates to the **Filter criteria**. In this example the following criteria was used:

```
request-uri!=noSPNEGO;request-uri!=/mobile;request-uri!=/nav;request-uri!=/bundles/js;request-uri!=/static;request-uri!=/activities/oauth;request-uri!=/blogs/oauth;request-uri!=/dogear/oauth;request-uri!=/communities/calendar/oauth;request-uri!=/communities/service/atom/oauth;request-uri!=/communities/service/opensocial/oauth;request-uri!=/communities/recomm/oauth;request-uri!=/connections/opensocial/oauth;request-uri!=/connections/opensocial/anonymous/rest;request-uri!=/connections/opensocial/common;request-uri!=/connections/opensocial/gadgets;request-uri!=/connections/opensocial/ic;request-uri!=/connections/opensocial/rpc;request-uri!=/connections/opensocial/social;request-uri!=/connections/opensocial/xrds;request-uri!=/connections/opensocial/xpc;request-uri!=/connections/resources/web;request-uri!=/connections/resources/ic;request-uri!=/files/oauth;request-uri!=/forums/oauth;request-uri!=/homepage/oauth;request-uri!=/metrics/service/oauth;request-uri!=/moderation/oauth;request-uri!=/news/oauth;request-uri!=/news/follow/oauth;request-uri!=/profiles/oauth;request-uri!=/wikis/oauth;request-uri!=/search/oauth;request-uri!=/connections/core/oauth;request-uri!=/resources;request-uri!=/oauth2/endpoint/
```

Note: Ensure that you separate each filter with a semicolon (;). No other character is allowed as a separator.

Filter class - leave this field blank to allow the system to use the default filter class (com.ibm.ws.security.spnego.HTTPHeaderFilter).

SPNEGO not supported error page URL - enter the URL to the redirect page that you created. For example: <http://webserver/NoSpnegoRedirect.html>. - where webserver is the name of your IBM HTTP Server instance and NoSpnegoRedirect.html is the name of the redirect page.

NTLM token received error page URL - enter the URL to the redirect page that you created. For example: <http://webserver/NoSpnegoRedirect.html>.

Select **Trim Kerberos realm from principal name**.
Select **Enable delegation of Kerberos credentials**.

Click **OK** and then click **Save**.

For example the setting should look like this:

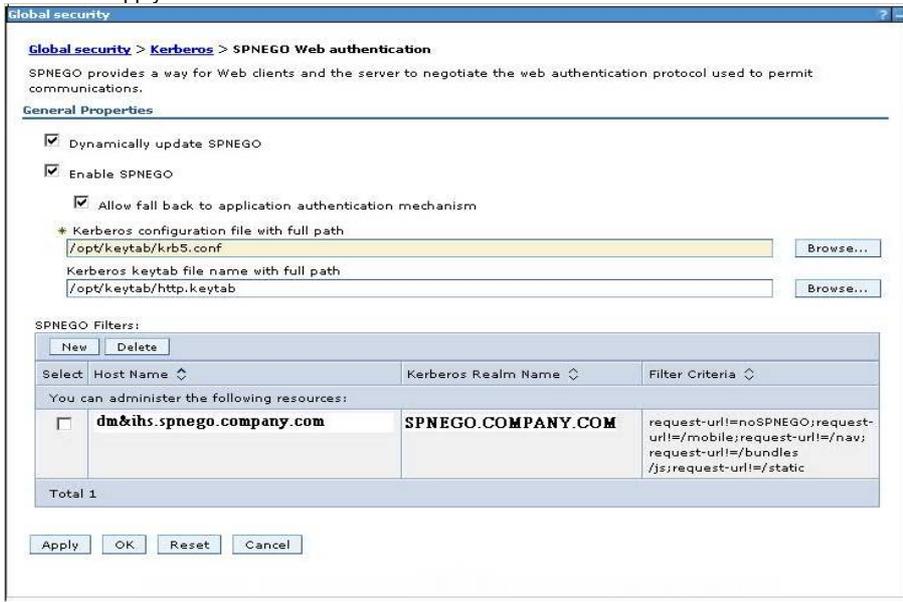
The screenshot shows the configuration page for SPNEGO Web authentication. The breadcrumb path is: Global security > Kerberos > SPNEGO Web authentication > dm&ihs.spnego.company.com. The page title is "Global security" and the subtitle is "Specifies the values for SPNEGO filter." The "General Properties" section contains the following fields and options:

- Host name:** dm&ihs.spnego.company.com
- Kerberos realm name:** SPNEGO.COMPANY.COM
- Filter criteria:** request-uri!=noSPNEGO;request-uri!=/mobile;request-uri!=/nav;request-uri!=/bundles/js;request-uri!=/static
- Filter class:** (empty)
- SPNEGO not supported error page URL:** http://dm&ihs.spnego.company.com/NoSpnegoRedirect.html
- NTLM token received error page URL:** http://dm&ihs.spnego.company.com/NoSpnegoRedirect.html
- Trim Kerberos realm from principal name
- Enable delegation of Kerberos credentials

Buttons at the bottom: Apply, OK, Reset, Cancel.

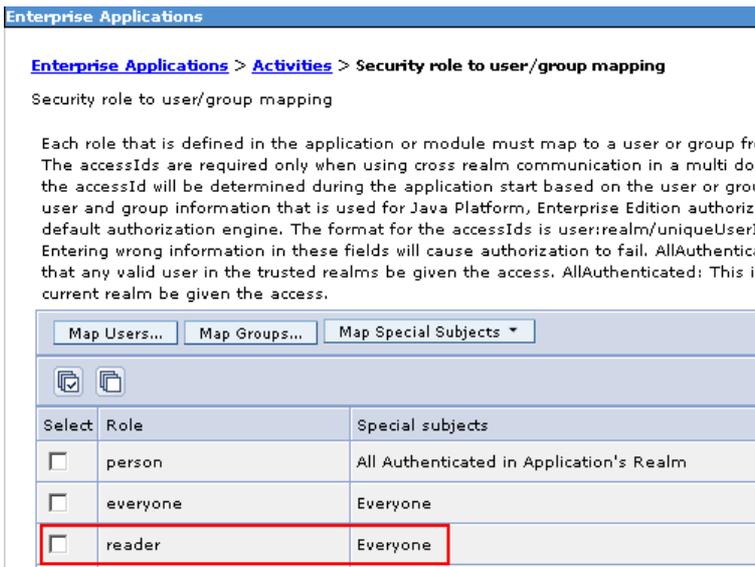
8. On the SPNEGO Web authentication page, complete the following steps:

- Select **Dynamically update SPNEGO.**
- Select **Enable SPNEGO.**
- Select **Allow fall back to application authentication mechanism.**
- Enter the path to the Kerberos configuration file in the **Kerberos configuration file with full path** field.
- Enter the path to the Kerberos keytab file in the **Kerberos keytab file name with full path** field.
- Click **Apply.**



9. Specify the level of authentication that users must go through to access your IBM Connections deployment. In the following choices, you can force users to always authenticate or allow users to access Blogs, Bookmarks, Communities, Files, Profiles, and Wikis anonymously. These anonymous users must log in only if they try to access a private area. For more information about forcing authentication, see the [Forcing users to log in before they can access an application topic](#).

The default is to **Allow anonymous access to IBM Connections** (also known as **Lazy SPNEGO**) and this is what is use in this example:
See



___10. Disable TAI authentication:

Important: If you are configuring Tivoli® Access Manager with SPNEGO, or SiteMinder with SPNEGO. Those configurations require the default value of true for this parameter.

Select **Security > Global Security > Custom properties > New** and enter:

NAME: **com.ibm.websphere.security.performTAIForUnprotectedURI**

Value: **false**

| | | |
|--------------------------|--|-------|
| <input type="checkbox"/> | com.ibm.websphere.security.performTAIForUnprotectedURI | false |
|--------------------------|--|-------|

___11. Verify that LTPA is selected as the default Authentication mechanism

In **Global Security** under Authentication verify that "**LTPA**" is selected as the default for "**Authentication mechanisms and expiration**". If it is not, then select this option and save.

Authentication

Authentication mechanisms and expiration

[LTPA](#)

Kerberos and LTPA

[Kerberos configuration](#)

[Authentication cache settings](#)

___12. Edit the following files:

a. **files-config.xml** set values to 'false'

```
<security reauthenticateAndSaveSupported="false">  
  <logout href="/files/ibm_security_logout" />  
  <inlineDownload enabled="false" />  
</security>
```

b. **LCC.xml (this should be already set:)** - Verify customAuthenticator name="DefaultAuthenticator"

```
<customAuthenticator name="DefaultAuthenticator"/>
```

___13. Stop and restart all servers:

- a) Do a Full Resynchronization of all Nodes.
- b) In **System administration > Node** agents do a Restart of all node agents
- c) On the Webserver do a Generate Plug-In and then Propagate Plug-In
- d) Stop and restart the webserver
- e) Stop all Connections' Clusters
- f) Stop and Restart the Deployment Manager
- g) Start all Connections' Clusters (this will take several minutes)

___14. Configure a supported web browser to support SPNEGO

see [How to configure web browsers to support](#)

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___15. Verify that Connections is configured for SPNEGO

Entering the following URL: **https://dm&ihs.spnego.company.com/homepage** in to your browser that has been configured for SPNEGO. The Connections' Home page should appear and you should be automatically logged in.