SELF-HOSTING

# **Kerberos Integration**

Ansicht im Hilfezentrum: https://bitwarden.com/help/kerberos-integration/

### **Kerberos Integration**

Kerberos integrated authentication allows Bitwarden users to use integrated AD authentication with external MSSQL databases.

#### (i) Note

This guide assumes that you have already exported the required keytab file that will be used on the Bitwarden server to authenticate to the domain.

#### **Keytab File**

An exported keytab file is used by the Bitwarden server to authenticate the domain.

1. From the Windows Domain controller, enter the following code example (this may vary depending on your requirements):

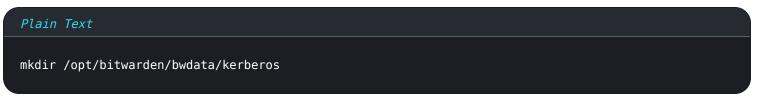
Plain Text	
ktpass /princ bitwarden@ <example.domain> /mapuser "bitwarden" /pass s</example.domain>	uper_secure_password_here /
out bitwarden.keytab /crypto all /ptype KRB5_NT_PRINCIPAL /mapop set	

2. Once the file has been generated, copy the file to the Bitwarden server location in the next section.

#### **Bitwarden Configuration**

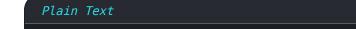
Next, create the Bitwarden configuration:

1. Create the Kerberos directory:



- 2. Place the two files in this directory
  - 1. The keytab file generated in the previous section
  - 2. the krb5.conf file (example below)

#### 3. Create the krb5.conf file:



nano /opt/bitwarden/bwdata/kerberos/krb5.conf

Here is an example file. Here is example TEST file.

Check that these values match your own and that the kdc and admin\_server are accessible from the Bitwarden server.

#### (i) Note

The ticket lifetime and renewal values are set in the krb5.config file using the ticket\_lifetime and renew\_lifetime variables. If both the ticket lifetime and ticket renewal expire, you will be unable to re-authenticate the ticket. For additional information, see the Kerberos documentation.

#### **Update Bitwarden**

#### global.override.env

In order to update Bitwarden, an additional environment variable will have to be added to the global.override.env file.

1. Access global.override.env:

 Plain Text

 nano ~/global.override.env/

2. Add the following variable to global.override.env:

Plain Text

globalSettings\_\_kerberosUser=bitwarden

#### (i) Note

This variable should be the AD user used to authenticate with the domain, and should match your domain user.

#### SQL connection string

Replace the SQL connection string to point to the external DB and use the integrated authentication. Change your SQL server hostnam e and database name:

#### Plain Text

```
globalSettings__sqlServer__connectionString="Data Source=tcp:example-sql-server.example.domain,143
3;Initial Catalog=vault;Persist Security Info=False;Integrated Security=true;Multiple Active Result
Sets=False;Connect Timeout=30;Encrypt=True;Trust Server Certificate=True"
```

#### **Docker updates**

Once the previous setup steps have been completed, the configuration file should exist on your host OS. Next, modify Bitwarden's Docker Compose configuration to add an additional volume mount to the relevant containers. This will ensure that the configuration is retained, following updates and changes to the main docker-compose file. Compose provides an **override** file that will merge your local changes to the standard Bitwarden configuration.

1. Create the override file:

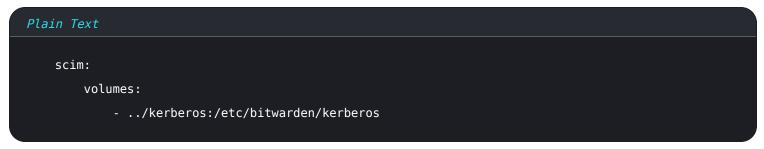
#### Plain Text

nano /opt/bitwarden/bwdata/docker/docker-compose.override.yml

2. Include the following contents for a standard configuration:

Plain Text
services:
admin:
volumes:
/kerberos:/etc/bitwarden/kerberos
sso:
volumes:
/kerberos:/etc/bitwarden/kerberos
identity:
volumes:
/kerberos:/etc/bitwarden/kerberos
api:
volumes:
/kerberos:/etc/bitwarden/kerberos
events:
volumes:
/kerberos:/etc/bitwarden/kerberos





4. Once completed, save the file.

#### **Starting Bitwarden**

Once setup has been completed, you may start Bitwarden. Restart the Bitwarden containers following the setup if you have not yet:

#### Plain Text

./bitwarden restart

The admin container will populate your new external MSSQL database. If you stored any information in the built-in mssql container, you will be required to migrate it to the new external database, with either database backup and restore, or export/import.