Software Download using SWDP CLI

Release 1.0



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| User Guide |
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# Overview

Nokia’s Software Delivery Platform (SWDP) offers a fully integrated and automated solution to deliver software to Nokia customers.

This user guide describes the Command Line Interface (CLI) method to:

* Generate and manage tokens that are required to access the SWDP system.
* Download software artifacts from SWDP.

Examples and commands are included for your reference.

# SWDP download sites

SWDP has two sites that can be used to download software:

* A site in Finland for all customers except the United States, and
* A site in the US for customers in the US.

Depending on the connection (VPN or no-VPN) between your system and the SWDP download site, you can download using the following URLs:

| **SWDP download site** | **From public internet**  **(Availability to be announced)** | **From Nokia VPN** |
| --- | --- | --- |
| FI (for non-US customers) | [https://swdp-fi.support.nokia.com](https://swdp-fi.support.nokia.com/) | [https://swdp-pull-fin.swdp.dyn.nesc.nokia.net](https://swdp-pull-fin.swdp.dyn.nesc.nokia.net/) |
| US (for US customers) | [https://swdp-us.support.nokia.com](https://swdp-us.support.nokia.com/) | [https://pull-us.swdp.dyn.nesc.nokia.net](https://pull-us.swdp.dyn.nesc.nokia.net/) |

# Access Token management

To access the SWDP download site via CLI, you will need a Personal Access Token (PAT).

Authentication to the SWDP download site is done using the username PAT and a generated access token.

The access token is generated and managed either using a dedicated service under the SWDP web GUI or using dedicated SWDP download site endpoint(s). The access token is decrypted on the SWDP side, and credentials are checked against Nokia users Active Directory.

Credentials must be passed via HTTP Basic Authentication (HTTP Header Authorization containing base64-encoded credentials).

## Access token management using CLI

This section explains how to generate or revoke an access token using CLI.

### Prerequisite

Ensure that you have access to the [Nokia Support Portal](file:///C:\Users\gequirog\AppData\Local\Microsoft\Windows\INetCache\Content.Outlook\CWR6J1WQ\(https:\customer.nokia.com\support\s\)). The registration guide to the Nokia Support Portal is available on the portal website.

For SWDP token generation, you need to specify the same credentials (email address and password) that you use to access the Nokia Support Portal.

### Generating an access token

1. To generate the access token, run the command below:

curl <*hostname*>/api/v1/token/create -u <*email address*> -X POST

#### The -u option is used to specify your Nokia Support Portal email address for authentication.

* You are prompted to enter a password.

1. Enter the same password you use to access Nokia Support Portal.

#### The token is valid for 3 months, after which the user must generate a new token.

Example:

curl https://swdp-pull-fi.swdp.dyn.nesc.nokia.net[/api/v1/token/create](https://interceptor.generic-finland-pull-cluster.near-sandbox.swdp.dyn.nesc.nokia.net/api/v1/token/create) -u john.smith@example.com -X POST

**IMPORTANT:**

Token generation is limited to 20 requests per minute per IP address. Whenever the limit is reached, error 429 is displayed.

**CAUTION:**

DO NOT ENTER THE PASSWORD DIRECTLY INTO THE COMMAND LINE!

The password should **be always** provided via the **prompt**. With this approach, it is ensured the password is not left in any bash history.

### Revoking the access token

When you no longer need a token, you can revoke it.

#### Revoke only one token

To revoke only one specific token, run the command below using the value PAT (personal access token) as username. When prompted for a password, the revoked token must be used:

curl <*hostname*>/api/v1/token/revoke -u PAT -X POST

Once the command is run, the token will be removed.

#### Revoke all tokens for a given authentication username (user mail, country code, end user id)

To revoke all tokens related to a specific authentication username, run the curl command shown below. When prompted for a password, the user password in LDAP must be used:

curl <*hostname*>/api/v1/token/revoke/all -u <*email address*> -X POST

This will remove all tokens of the given authentication username.

## Access token management using SWDP Portal (Availability to be announced later)

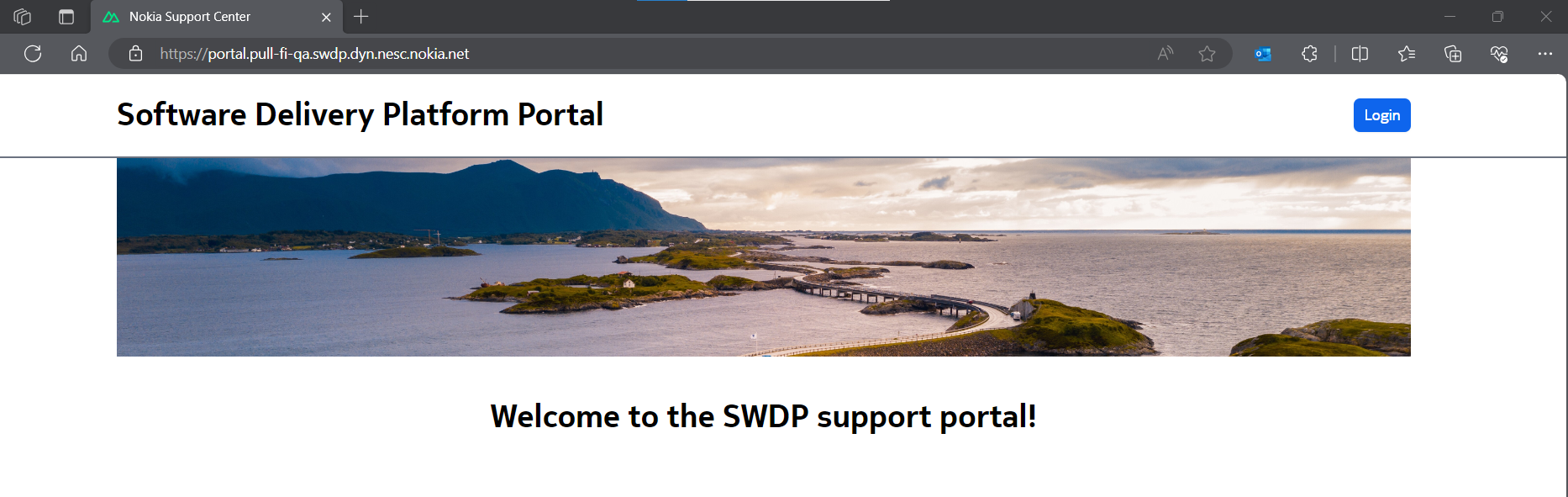
This section will cover how to generate a token, view or delete a token using the SWDP Portal**.**

SWDP Portal offers two web portal URLs to create access tokens:

* To create tokens for a customer located in the United States, use: <https://portal.pull-us.swdp.dyn.nesc.nokia.net/>
* To create tokens for a non-US customer, use:

<https://portal.swdp-pull-fin.swdp.dyn.nesc.nokia.net/>

Figure 1 SWDP Portal landing page



### Logging in to SWDP Portal

On the SWDP Portal, click the **Login** button at the top-right corner.

* Pick your account from the list shown, or
* Click the **Use another account** button to sign in with a different email and password.

#### Pick an Account

If you see your credentials in the displayed list, click on it:

Figure 2 Accounts available when logging in.

A screenshot of a computer

Description automatically generated

Once you click your account, you will be logged in.

#### Use Another Account

If you do not see your account, click the **Use another account** button, then type your email:

Figure 3 Sign in window

A screenshot of a computer

Description automatically generated

Then type your password:

Figure 4 Password Window

A screenshot of a login page

Description automatically generated

* If logging in for the first time, then a pop-up window is displayed asking you to grant access. Click **Accept** to grant access.
* After 1 hour of inactivity, if you click on any element, you will be automatically redirected to the login page.

### Managing access tokens using SWDP Portal

In this section you will be guided on how to navigate the SWDP Portal to create, delete and view token(s).

#### Access Tokens

After you have logged into the SWDP Portal, you will see the landing page. Click the **Access Tokens** button:

Figure 5 SWDP Portal after successful login

A screenshot of a computer

Description automatically generated

You will see the Token Management Page. From here, you can generate, delete and view your token(s):

Figure 6 Access token window

A screenshot of a computer

Description automatically generated

#### Generating a token

1. To create a token, click the **Generate Token** button.

A new pop-up window will appear, asking you to provide a name to your token.

* Type a unique name meeting the following criteria:
* Starts and ends with an alphanumeric character.
* Does not contain any other characters.
  + Max 64 characters.
  + May contain alphanumeric characters or hyphens.

**NOTE**: Country code and Customer ID will be automatically populated and are not editable.

Figure 7 Generate new access token dialog box

A screenshot of a login page

Description automatically generated

After Typing the name, click **Submit** button.

1. The next pop-up window will contain the token.

Figure 8 Token created dialog box

A screenshot of a computer error

Description automatically generated

* Make sure to copy it now and store it in a safe place. It will not be shown to you again.

1. After you copy your token, click the **Close**button.
2. You will see your previous and recently created token names.

Figure 9 Access token window

A screenshot of a computer

Description automatically generated

#### Delete Tokens

There are two options for deleting tokens:

* Select one or more tokens to delete individually, or
* Delete all your tokens at once.

To delete one or multiple tokens, click the checkbox next to each token's name, then click the **Delete selected** button. A confirmation message displays. Click **Yes** to delete the selected tokens.

Figure 10 Selection of token(s) to be deleted.

A screenshot of a computer

Description automatically generated

If you want to delete all tokens at once, click the **Delete all** button. You will be prompted to confirm your choice to delete all your access tokens. Click **Yes** to delete all tokens.

Figure 11 Delete all Tokens pop-up window

A screenshot of a computer

Description automatically generated

#### Expiration of a token

If you have any token(s) that are about to expire, you will receive an email notification with the information from each token. If you still need the token(s), make sure to create new ones on the SWDP Portal.

* Email notification is set to two weeks, one week, one day and the day of expiration of the token. Expired tokens get deleted once the last notification is sent on day of expiration.

# Software download

There are three types of download commands described in this section:

* Generic file download
* Helm chart download
* Docker image download

## Generic file download

The generic file download is completed using the wget command.

1. Run the following wget command:

wget --http-user=PAT --ask-password https://<*swdp download site*>/artifactory/<*product-name*>-Product/<*file-path*>

* The --http-user option is used to specify the username for HTTP authentication, which is a static value PAT (personal access token).
* The --ask-password option prompts the user to enter a token for authentication.

1. Enter the token to proceed with download.

**Example:**

End customer downloading a file for Altiplano Access Controller:

$ wget --http-user=PAT --ask-password [https://swdp-fi.support.nokia.com](https://swdp-fi.support.nokia.com/artifactory/Altiplano-Access-Controller-Product/21.6.2/21.6.2/INSTALL_MEDIA/product.txt)[/artifactory/Altiplano-Access-Controller-Product/21.6.2/21.6.2/](https://swdp-fi.support.nokia.com/artifactory/Altiplano-Access-Controller-Product/21.6.2/21.6.2/METADATA/product.txt)[INSTALL\_MEDIA/product.txt](https://swdp-fi.support.nokia.com/artifactory/Altiplano-Access-Controller-Product/21.6.2/21.6.2/INSTALL_MEDIA/product.txt)

## Helm chart download

The Helm chart download must be started with the helm repo command. Once this command is entered, then other helm commands can be used. Following is the format for the helm repo command:

helm repo add <*reponame*> <*hostname*>/artifactory/<*product-name*>-Helm --username PAT --password <*token*> --pass-credentials

**Example:**

helm repo add altiplano <https://swdp-fi.support.nokia.com/artifactory/Altiplano-Access-Controller-Product-Helm> --username PAT --password <token> --pass-credentials

After that, the regular helm commands will work:

helm search repo altiplano-infra –versions –devel

helm pull aprepo/altiplano-infra --version 21.12.1-REL-0216

helm pull fmcrepo/altiplano-infra --version 21.12.1-REL-0216

## Docker image download

Run the following command to log in to Docker:

docker login https://<*product name*>-docker.<*hostname*> -u PAT

**Example:**

docker login [https://altiplano-access-controller-product-docker.swdp-fi.support.nokia.com](https://altiplano-access-controller-product-docker.swdp-fi.support.nokia.com/) -u PAT

After logging in, enter the access token, when prompted.

After that, the regular docker commands will work:

docker pull [altiplano-access-controller-product-docker.swdp-fi.support.nokia.com/anv:21.12.1-REL\_251](http://altiplano-access-controller-product-docker.swdp-fi.support.nokia.com/anv:21.12.1-REL_251)  
docker pull [altiplano-fastmile-controller-product-docker.swdp-fi.support.nokia.com/anv:21.12.1-REL\_251](http://altiplano-fastmile-controller-product-docker.swdp-fi.support.nokia.com/anv:21.12.1-REL_251)

# Definition and acronyms

|  |  |
| --- | --- |
| Term | Definition |
| Generic File | A file of the lowest delivery level of a product |
| Helm Chart | A Helm chart is a package format. It is also known as containerized software |
| Docker image | A Docker image is a lightweight, standalone, executable package that contains everything needed to run a piece of software, including the code, runtime, libraries, and dependencies. |
| HTTP Basic Authentication | Involves the process of securely accessing web resources via commands in a terminal or console. The method described in this guide is token-based. |
| Token | Is a unique and encrypted piece of data used for authentication |

|  |  |
| --- | --- |
| Acronym | Definition |
| CLI | Command Line Interface |
| HTTP | Hypertext Transfer Protocol |
| SWDP | Software Delivery Platform  Common name for the ecosystem consisting of SEaDOC and NEAR |
| PAT | Personal Access Token |
| LDAP | Lightweight Directory Access Protocol |
| GUI | Graphical User Interface |
| API | Application Programming Interface |
| VPN | Virtual Private Network |
| CURL | Client URL |
| SEaDOC | Software Entitlement and Delivery Orchestration Center  Based on the eccenca Corporate Memory solution. Links the commercial entitlement to the detailed technical product structure, orchestrates the SW distribution, orchestrates delivery compliance checks. |
| NEAR | Nokia Enterprise Artifacts Repository  Is the main SW Repository of SWDP. Its based on JFrog’s Enterprise solution, which is an end-to-end universal DevOps platform for CI/CD pipelines and includes all JFrog products such as Artifactory, Distribution and Mission Control. |