



# **ADDITIONAL DOCUMENTATION**

## **Introduction to SAPUI5**

**Course: S32 - SAPUI5**

**Unit: 04 - SAP WebIDE**

**Quick: S32-04-99 - Personal WebIDE**



## Discontinuation of Cloudplattform NEO by SAP

Relatively surprisingly, an announcement came from SAP at the beginning of September 2020, discontinuing the cloud platform NEO for the trial variants of the SAP offerings. The cut-off date (as of Sept. 13, 2020) is Nov. 13, 2020, when NEO will be completely shut down.

One consequence of this discontinuation was that new trial users were no longer allowed to access the NEO platform, and that thus the WebIDE inside the NEO platform is no longer available. However, users with productive / licensed (paid) access still can work with SAP WebIDE. Although these restrictions have been relaxed somewhat, access to the SAP WebIDE via the SAP Cloud platform is still quite difficult.

As an alternative, SAP offers a tool called **SAP Business Application Studio (BAS)** in the CloudFoundry platform. This is a completely new development of the web-based development environment, which is reminiscent in parts of the "old" WebIDE. However, based on experience to date (as of 09/13/2021), this product is still unstable, non-functional and overloaded with functions. The use for learning SAPUI5 is from our side still not recommended.

Instead, a somewhat slimmed down version of WebIDE can be downloaded, installed and configured as **SAP WebIDE Personal Edition** from SAP. This document describes the necessary procedure. With the Personal Edition, running your Quicksted course *S32 - Introduction to SAPUI5* is straightforward and requires no changes.

## Documentation for Non-Windows-Hardware

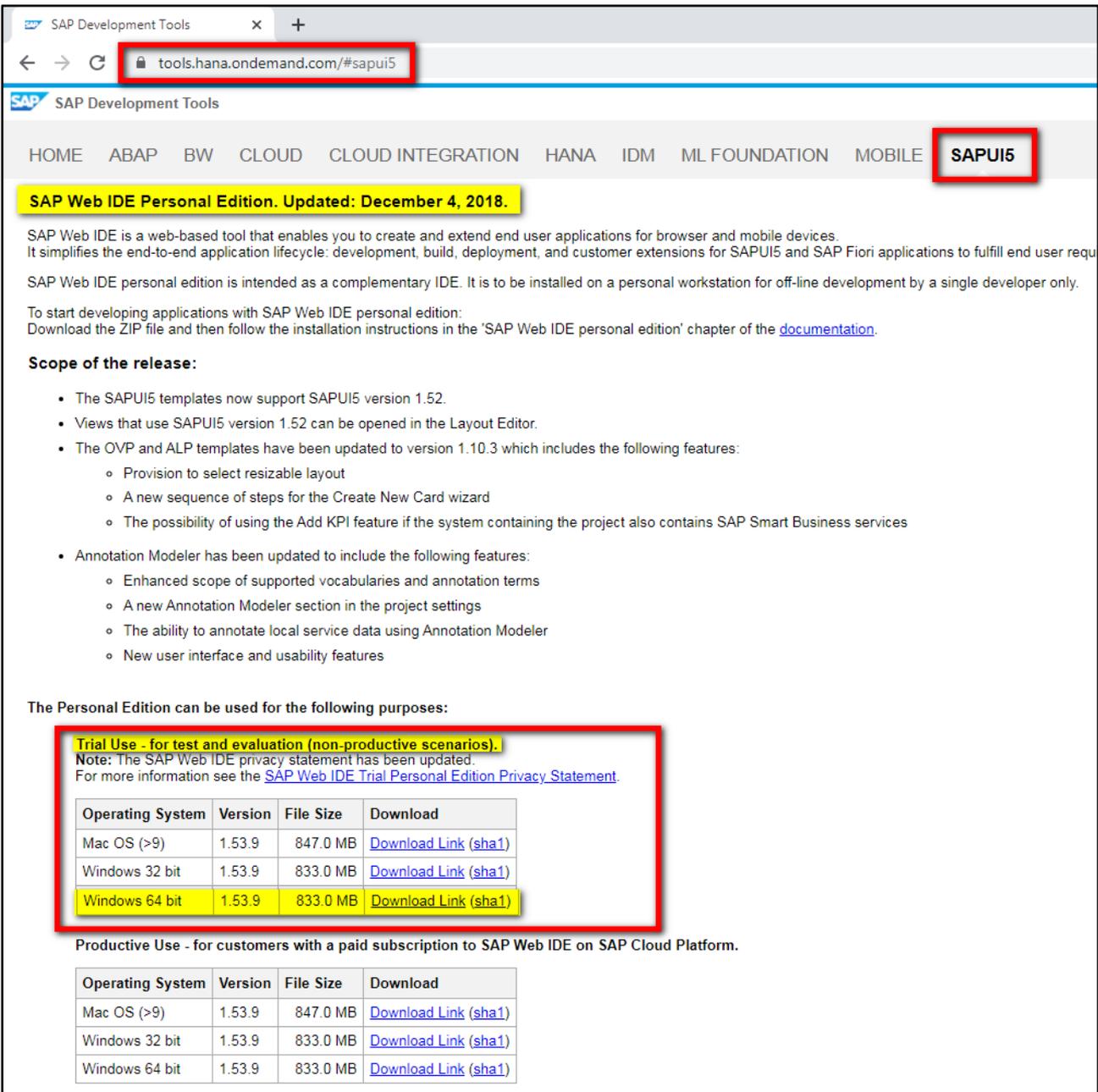
- For a **Mac** there is documentation by SAP:  
<https://docplayer.net/20610363-H2g-install-sap-web-ide-locally-for-trial-mac-version.html>
- For **Linux** there is no documentation known to us.

## Download of the necessary software

Two downloads are required to do the installation. One is the SAP WebIDE itself. You can find it at

<https://tools.hana.ondemand.com>

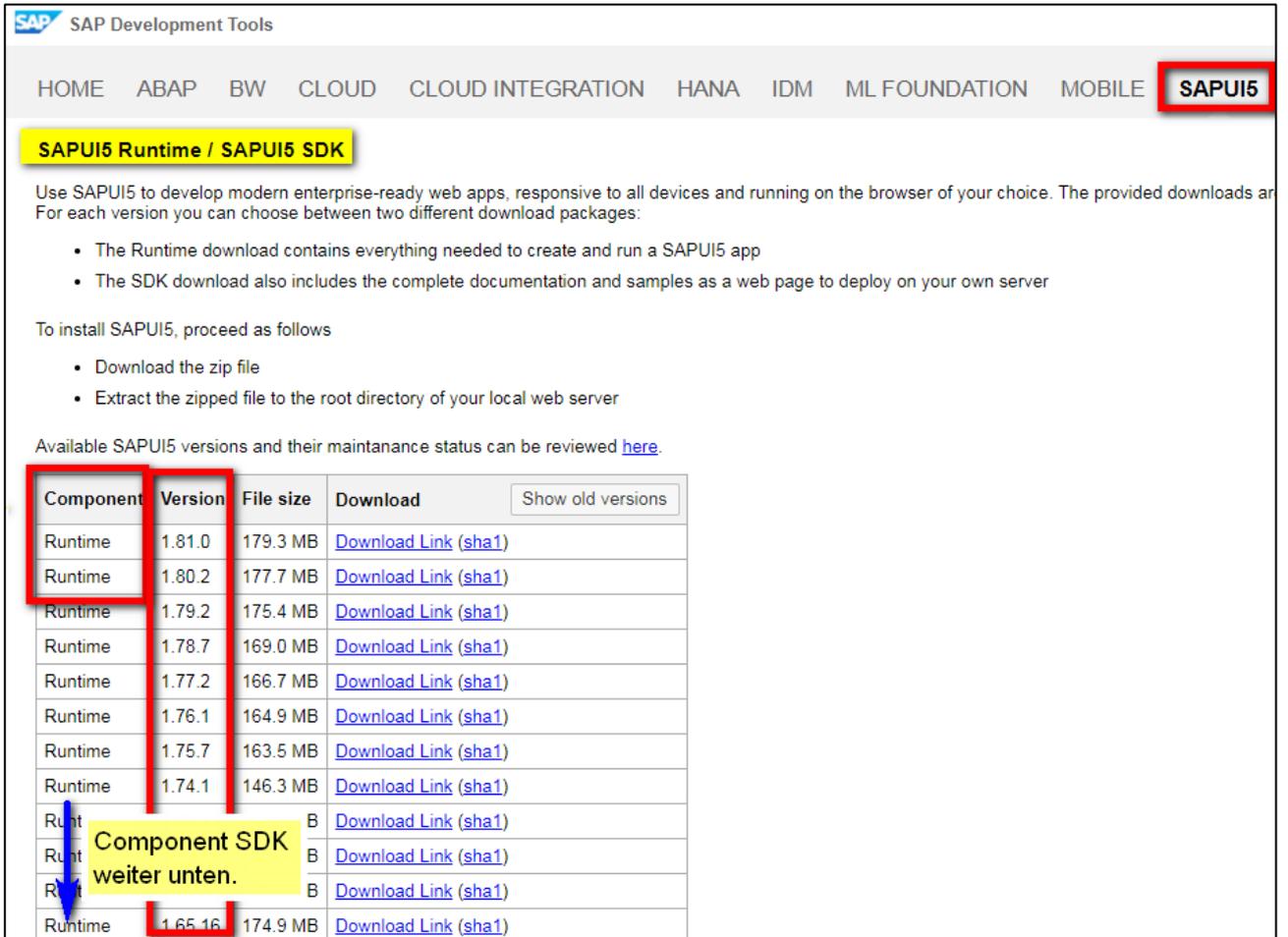
on the SAPUI5 tab. On this page, scroll down a bit and click on the download link (see figure below).



The SAP WebIDE has been tested for installation on a 64-bit Windows operating system.

The SAP WebIDE is delivered with SAPUI5 versions 1.38.0, 1.44.0 and 1.52.0 by default. At the time of writing this document, version 1.93.0 is active, the course works with version 1.60.0. Since version 1.60 is accompanied by numerous changes, in particular with the asynchronous processing of JavaScript programs, at least this version should also be made available to the SAP WebIDE Personal Edition. This document therefore describes the additional installation of this version 1.60.30 (30 denotes the latest patch level) and the most current version 1.93.0 as of today (09/13/2021).

The necessary sources for the SAPUI5 versions can be found in the same tab directly under the SAP WebIDE Personal Edition section. Whether the Software Development Kit (SDK) or just the runtime version is used is ultimately irrelevant. This document uses the SDK.



**SAPUI5 Runtime / SAPUI5 SDK**

Use SAPUI5 to develop modern enterprise-ready web apps, responsive to all devices and running on the browser of your choice. The provided downloads are for each version you can choose between two different download packages:

- The Runtime download contains everything needed to create and run a SAPUI5 app
- The SDK download also includes the complete documentation and samples as a web page to deploy on your own server

To install SAPUI5, proceed as follows

- Download the zip file
- Extract the zipped file to the root directory of your local web server

Available SAPUI5 versions and their maintenance status can be reviewed [here](#).

Component	Version	File size	Download	Show old versions
Runtime	1.81.0	179.3 MB	<a href="#">Download Link (sha1)</a>	
Runtime	1.80.2	177.7 MB	<a href="#">Download Link (sha1)</a>	
Runtime	1.79.2	175.4 MB	<a href="#">Download Link (sha1)</a>	
Runtime	1.78.7	169.0 MB	<a href="#">Download Link (sha1)</a>	
Runtime	1.77.2	166.7 MB	<a href="#">Download Link (sha1)</a>	
Runtime	1.76.1	164.9 MB	<a href="#">Download Link (sha1)</a>	
Runtime	1.75.7	163.5 MB	<a href="#">Download Link (sha1)</a>	
Runtime	1.74.1	146.3 MB	<a href="#">Download Link (sha1)</a>	
Runtime		B	<a href="#">Download Link (sha1)</a>	
Runtime		B	<a href="#">Download Link (sha1)</a>	
Runtime		B	<a href="#">Download Link (sha1)</a>	
Runtime	1.65.16	174.9 MB	<a href="#">Download Link (sha1)</a>	

Component SDK weiter unten.

For further processing, the SAP WebIDE and the SDKs for versions 1.60.30 and 1.93.0 must therefore be downloaded.

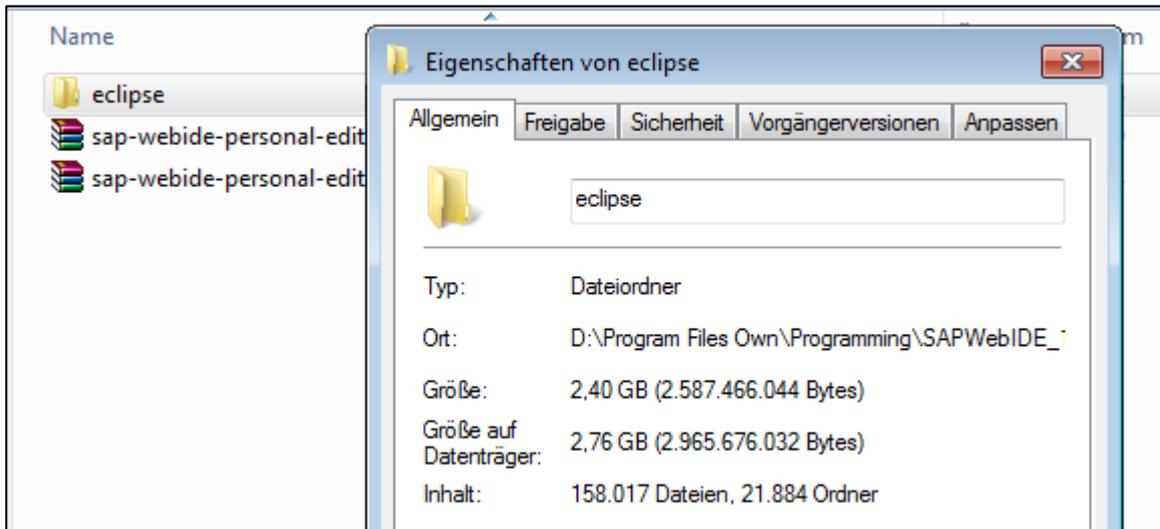
Also Java at least in version 1.7 is required. If necessary, this must be downloaded and installed beforehand.

## Installation of SAP WebIDE Personal Edition

The downloaded zip file must first simply be unpacked into a prepared folder.

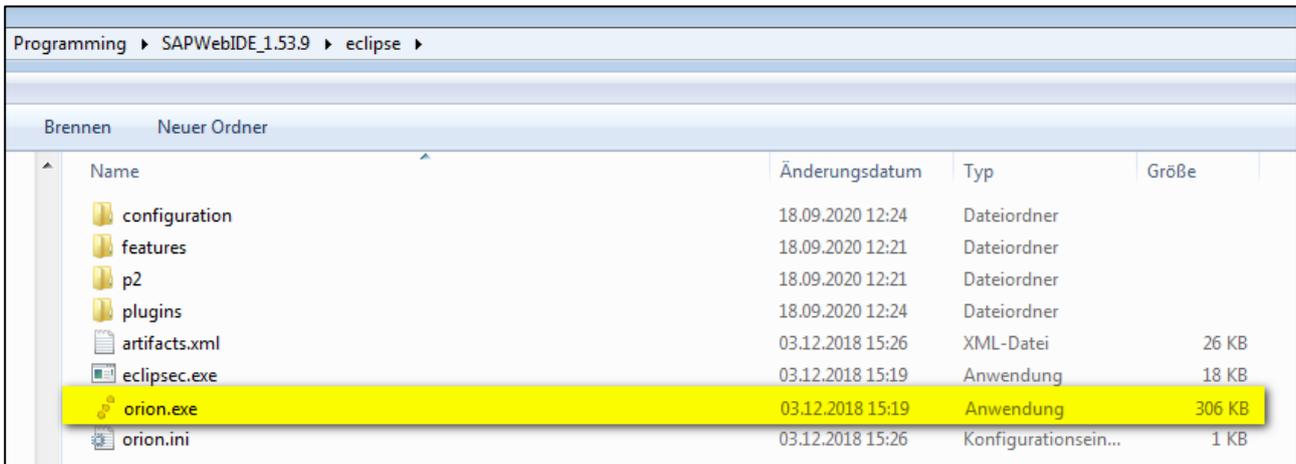
**Attention!** Some of the files exceed the limited length of file names allowed by Windows. It must be ensured that the unpacker can handle long file names!

**Attention!** The unpacking process can take up to 20 minutes, depending on the working environment, because nearly 160,000 files have to be unpacked.

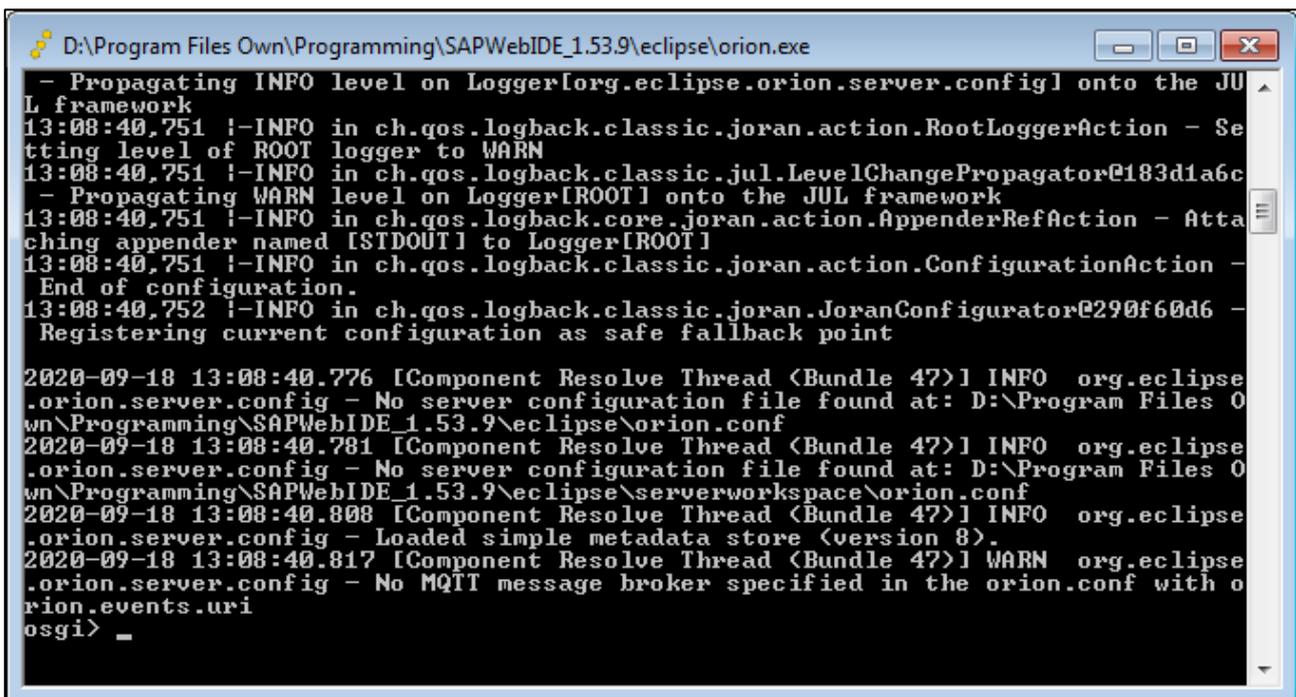


## Starting the SAP WebIDE Personal Edition

The SAP WebIDE Personal Edition is started by executing the executable *orion.exe* in the installation folder.



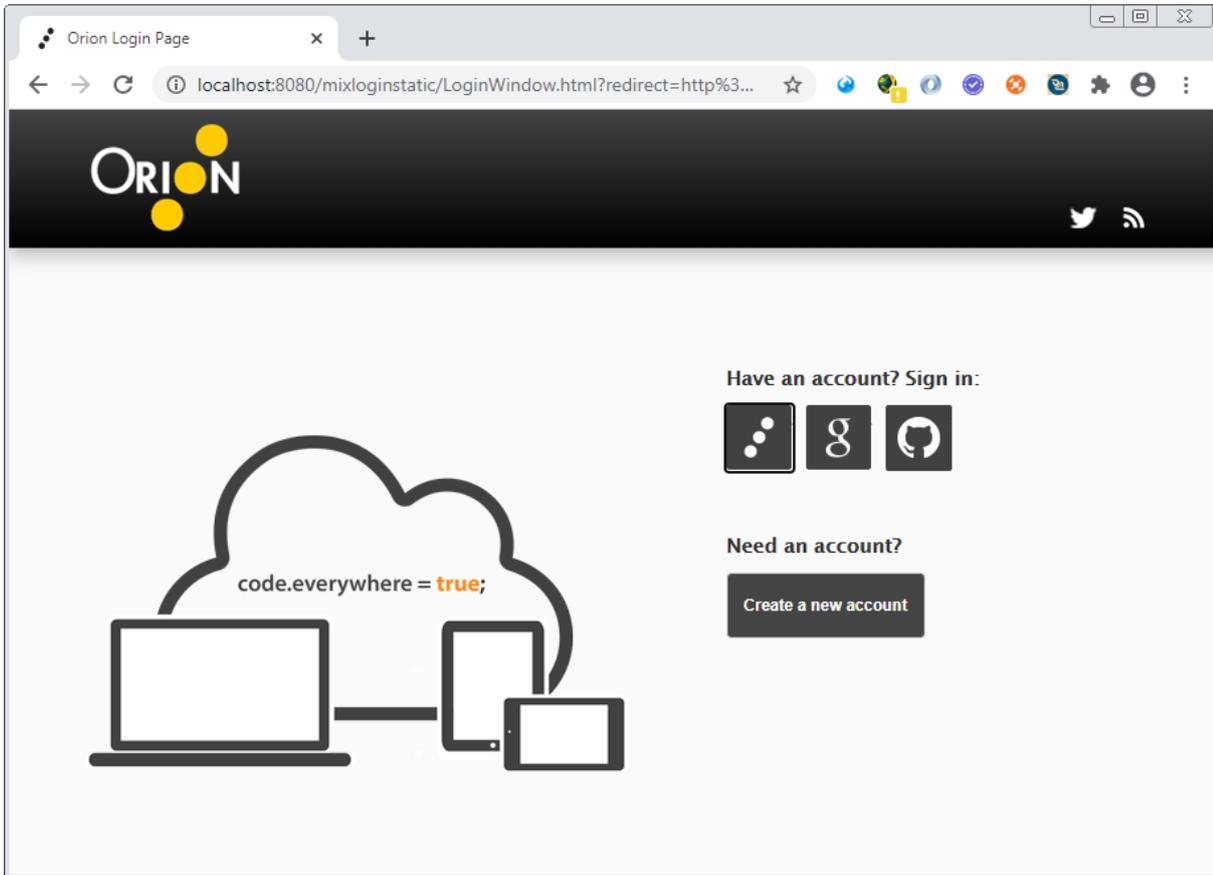
The console window that pops up afterwards is the central element of the software. It must remain open during the entire runtime. Closing this window will automatically stop SAP WebIDE Personal Edition.



Most of the error messages in this window are negligible and need not be pursued further.

Access to the development environment can be obtained via the link

<http://localhost:8080/webide/index.html>



An account must now be created.

**Create an account**

quicksted

.....

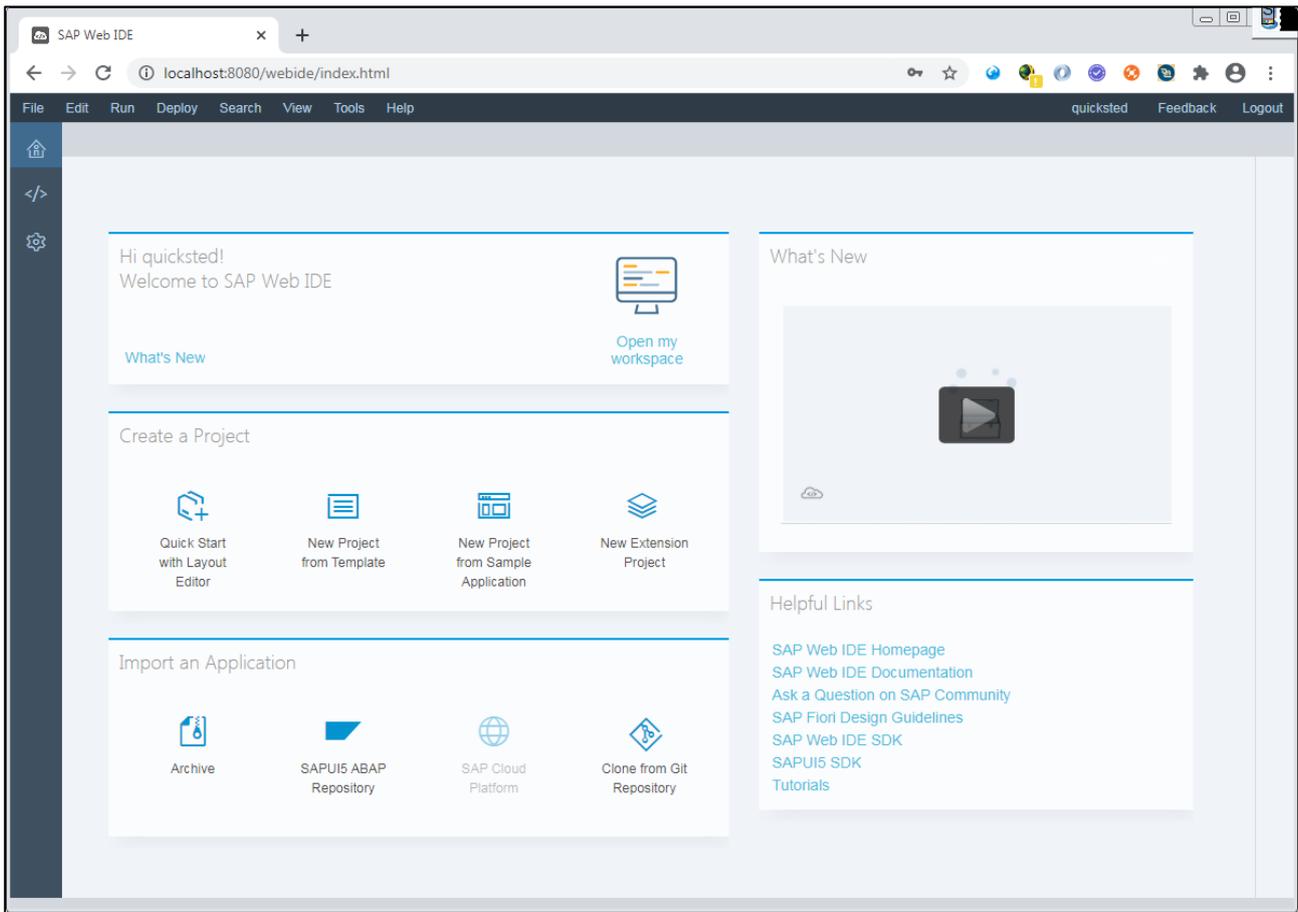
.....

info@quicksted.com

Cancel Sign up

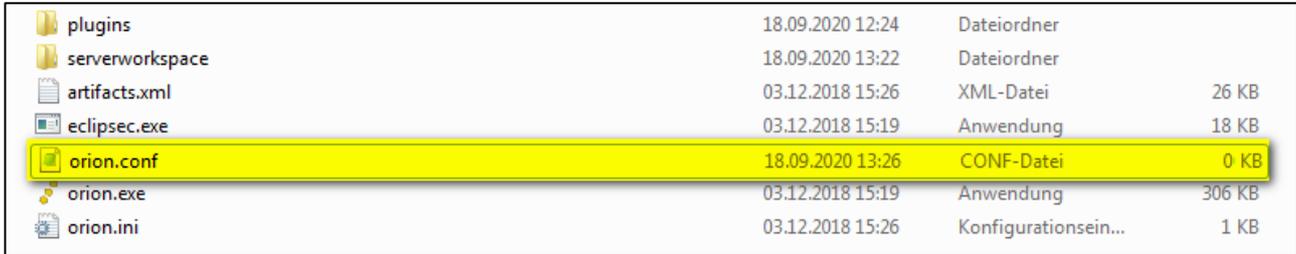
Username and password are mandatory. An eMail must be provided, but will never be used. A fake address (like aaa@bbb.cc) is accepted.

After login, the familiar WebIDE screen appears.



## User administration

A user administration (especially for resetting passwords) can be realized by a (fix given) additional administration user. For this, a file *orion.conf* must be created with a text editor, for example in the same folder as *orion.exe* (there are some other possible locations, but this will do).



Name	Modified	Type	Size
plugins	18.09.2020 12:24	Dateiordner	
serverworkspace	18.09.2020 13:22	Dateiordner	
artifacts.xml	03.12.2018 15:26	XML-Datei	26 KB
eclipsec.exe	03.12.2018 15:19	Anwendung	18 KB
<b>orion.conf</b>	<b>18.09.2020 13:26</b>	<b>CONF-Datei</b>	<b>0 KB</b>
orion.exe	03.12.2018 15:19	Anwendung	306 KB
orion.ini	03.12.2018 15:26	Konfigurationsein...	1 KB

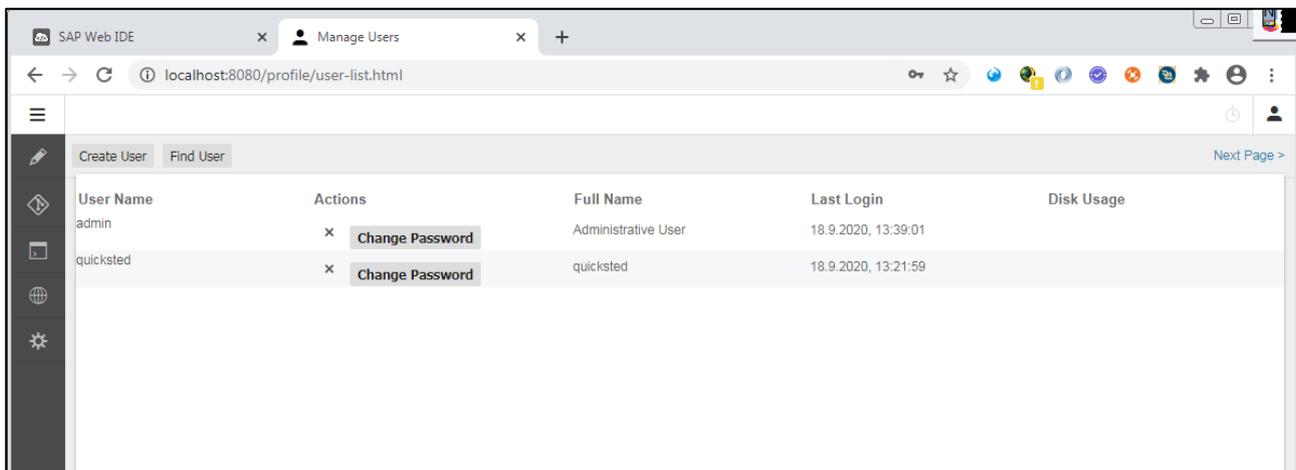
One line is entered in this file:

```
orion.auth.admin.default.password=admin1234
```

This entry sets for the (as mentioned fixed) administration user admin the password to admin1234.

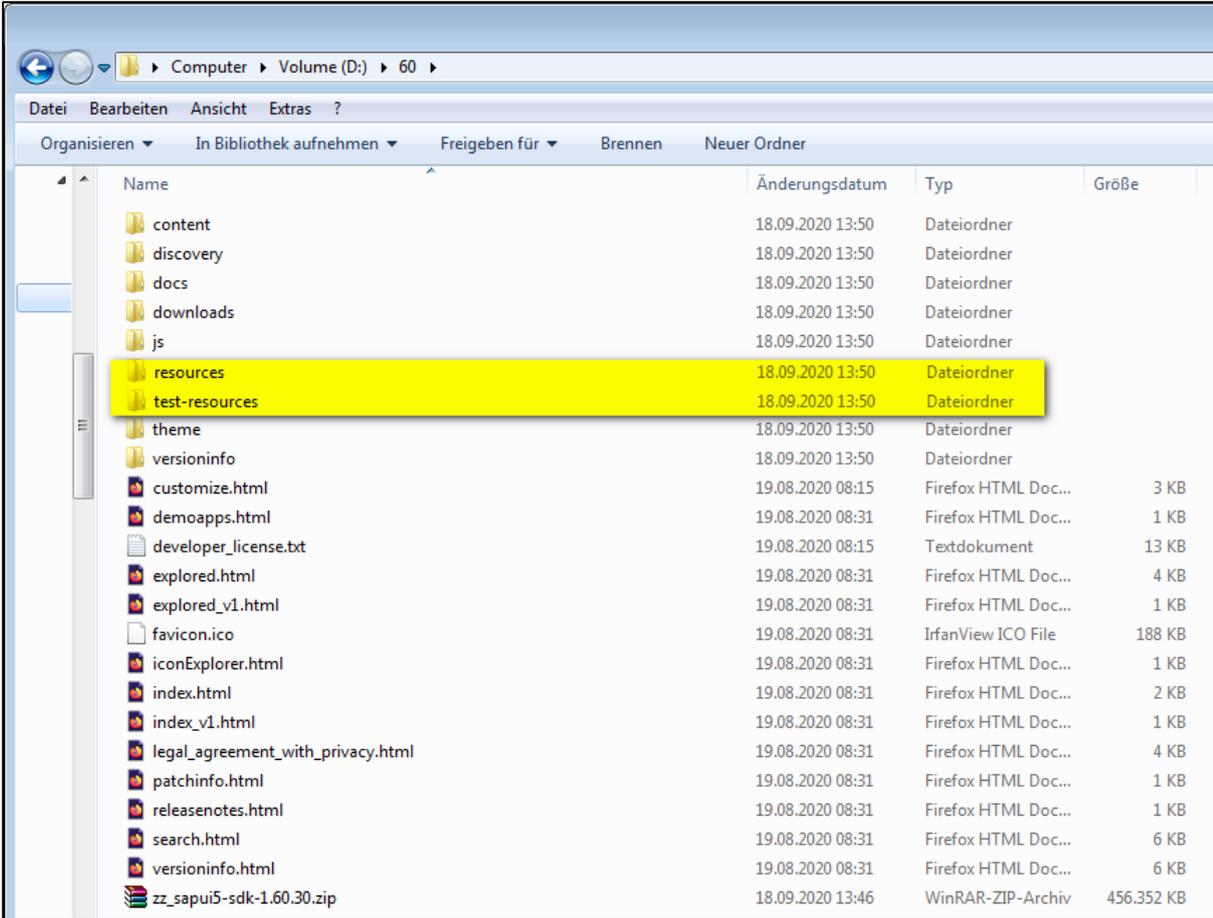
A profile editor can then be called up:

<http://localhost:8080/profile/user-list.html>

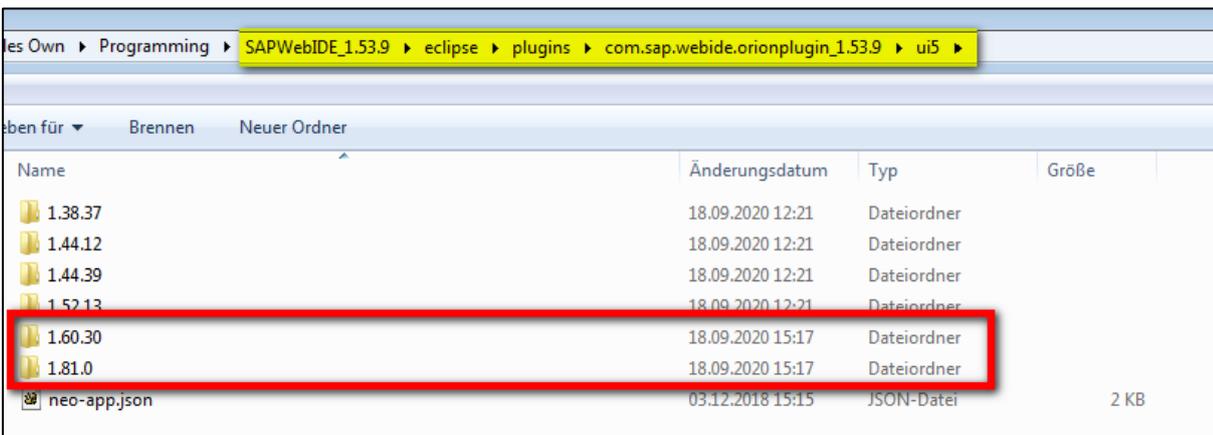


## Integration of further SAPUI5 versions

The two downloaded files (with the different versions) must be temporarily unpacked into different directories in each case. To avoid the restriction due to the file name length, it is a good idea to do this in directories that are as short as possible, e.g. C:\60. After the installation these directories can of course be deleted.

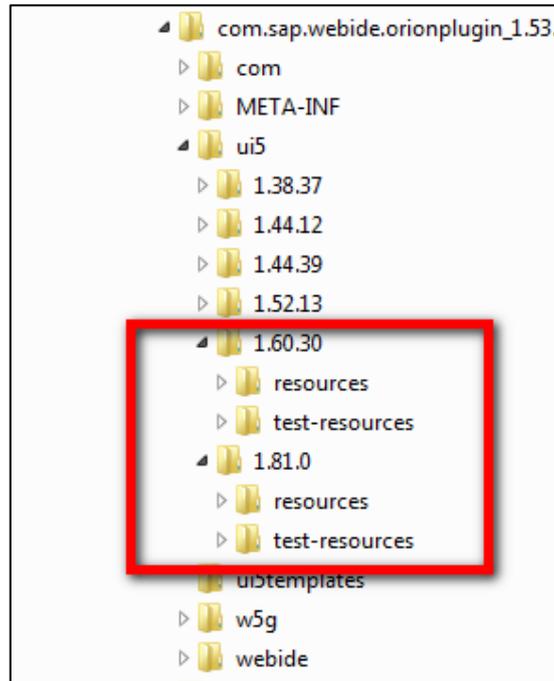


Of these files, only the two folders *resources* and *test-resources* are interesting. All other folders and files can be deleted.



In the WebIDE directory shown above, two new folders must now be created, whose names correspond to the two versions [here: 1.60.30 and 1.81.0]

The content of the temporary (unpack) directories must then be moved to their respective folders in the SAP WebIDE directory. (Although some sources say that this only has to be done with the two folders resources and test-resources, in this example installation there were startup problems without the other files! To be on the safe side, please do so!)



In the *ui5* directory above the version directories there is a file *neo-app.json*. This must be informed about the newly added versions. For this purpose, two new entries must be written into the *routes* object analogous to the existing ones.

```
"routes": [
  {
    "path": "/",
    "target": {
      "type": "service",
      "name": "sapui5",
      "version": "1.44.12",
      "preferLocal": true
    },
    "description": "SAPUI5 1.44.12"
  },
  {
    "path": "/1.38.37",
    "target": {
      "type": "service",
      "name": "sapui5",
      "version": "1.38.37",
      "preferLocal": true
    },
    "description": "SAPUI5 1.38.37"
  },
  {
    "path": "/1.44.39",
    "target": {
      "type": "service",
      "name": "sapui5",
      "version": "1.44.39",
      "preferLocal": true
    },
    "description": "SAPUI5 1.44.39"
  },
  {
    "path": "/1.52.13",
    "target": {
      "type": "service",
      "name": "sapui5",
      "version": "1.52.13",
      "preferLocal": true
    },
    "description": "SAPUI5 1.52.13"
  },
  {
    "path": "/1.60.30",
    "target": {
      "type": "service",
      "name": "sapui5",
      "version": "1.60.30",
      "preferLocal": true
    },
    "description": "SAPUI5 1.60.30"
  },
  {
    "path": "/1.81.0",
    "target": {
      "type": "service",
      "name": "sapui5",
      "version": "1.81.0",
      "preferLocal": true
    },
    "description": "SAPUI5 1.81.0"
  }
],
```

```
{
  "path": "/1.52.13",
  "target": {
    "type": "service",
    "name": "sapui5",
    "version": "1.52.13",
    "preferLocal": true
  },
  "description": "SAPUI5 1.52.13"
},
{
  "path": "/1.60.30",
  "target": {
    "type": "service",
    "name": "sapui5",
    "version": "1.60.30",
    "preferLocal": true
  },
  "description": "SAPUI5 1.60.30"
},
{
  "path": "/1.81.0",
  "target": {
    "type": "service",
    "name": "sapui5",
    "version": "1.81.0",
    "preferLocal": true
  },
  "description": "SAPUI5 1.81.0"
}
],
```

In some Internet sources (including the one below) the Maven version is also being rewritten to a more current one (here the 1.60.30). Whether this has or will have an impact on the SAP WebIDE is, however, disputed.

```
{
  "maven": {
    "groupId": "com.sap.ui5.dist",
    "artifactId": "sapui5-sdk-dist",
    "version": "1.60.30",
    "classifier": "hcp-static",
    "type": "zip"
  },
  "welcomeFile": "index.html",
  "authenticationMethod": "none",
  "cacheControl": [
    {
      "maxAge": 31536000
    }
  ],
  "routes": [
```

The new existing versions should also be announced to the SAPUI5 templates within the SAP WebIDE. The necessary configuration file can be found here:

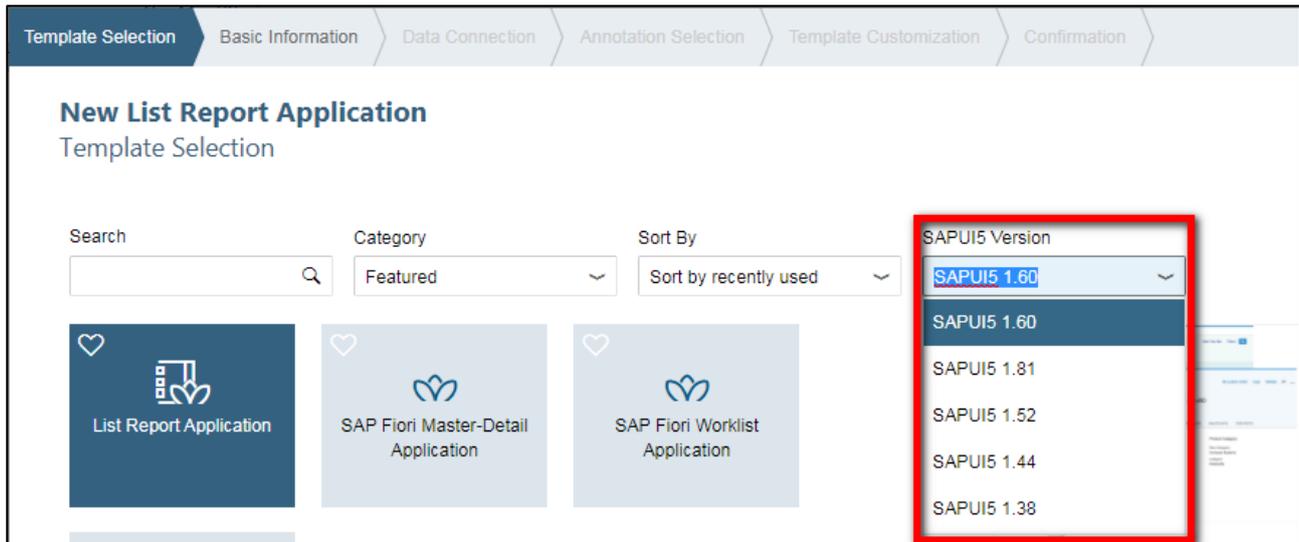


Name	Änderungsdatum	Typ	Größe
 versionoverview.json	03.12.2018 15:15	JSON-Datei	1 KB

The two new versions are to be entered in the *versionoverview.json* file. The order plays a role insofar as it determines the order in the dropdown list for the versions within the templates. The order below was therefore deliberately chosen so that version 1.60 is the first to appear in the list..

```
{
  "versions": [
    {
      "version": "1.60.*",
      "support": "Maintenance",
      "eom": "Q4/2021"
    },
    {
      "version": "1.81.*",
      "support": "Maintenance",
      "eom": "08/2020"
    },
    {
      "version": "1.52.*",
      "support": "Maintenance",
      "eom": "Q4/2020"
    },
    {
      "version": "1.44.*",
      "support": "Maintenance",
      "eom": "Q4/2019"
    },
    {
      "version": "1.38.*",
      "support": "Maintenance",
      "eom": "Q3/2018 (via UI add-on V2 until Q2/2020)"
    }
  ]
}
```

At least one source suggests setting the property *maxAge* of the property *cacheControl* to zero in the *neo-app.json* file already used above, and then stopping and starting the SAP WebIDE. Then set the value back to the default 31536000 (365 days in seconds) and stop and start again. This should have influence on the CacheBuster functionality in interaction with SAP NetWeaver accesses. [For a definition of the CacheBuster mechanism, see sources below.] However, it could not be ensured that this interrelationship actually exists. This intervention certainly does no harm, which is why it should be performed. At the end of this procedure the SAP WebIDE should be running in the console window.



Finally, the cache of the browser used must be cleared and the SAP WebIDE then called up. When creating a new project via *New -> Project from Template*, the available versions should be listed in the first screen in exactly the same order as they were previously defined in the *versionoverview.json* file.

## Einrichten von Deploy- und Datendestinationen

In the SAP WebIDE, the CloudConnector ensures that there is a connection between the SAP Cloud and the customer's network for deployment and data supply purposes. However, the CloudConnector cannot be connected to the SAP WebIDE Personal Edition, as this requires functionalities of the SAP Cloud Cockpit that cannot be accessed.

Instead, there is a mechanism that reads the required data from a file in the SAP WebIDE installation directory and makes it available to SAP WebIDE in this way. This file must have the same name as the SAP system to be connected and must be stored in the installation directory under

```
..\eclipse\config_master\service.destinations\destinations
```

If these directories do not exist, they must be created.

The contents of this file must be the following:

```
#ServiceDestination
Description=System NPL
Type=HTTP
TrustAll=true
Authentication=NoAuthentication
Name=NPL
sap-client=001
ProxyType=Internet
URL=https://localhost:8022
WebIDEUsage=odata_abap,ui5_execute_abap,dev_abap
WebIDESystem=NPL
WebIDEEnabled=true
```

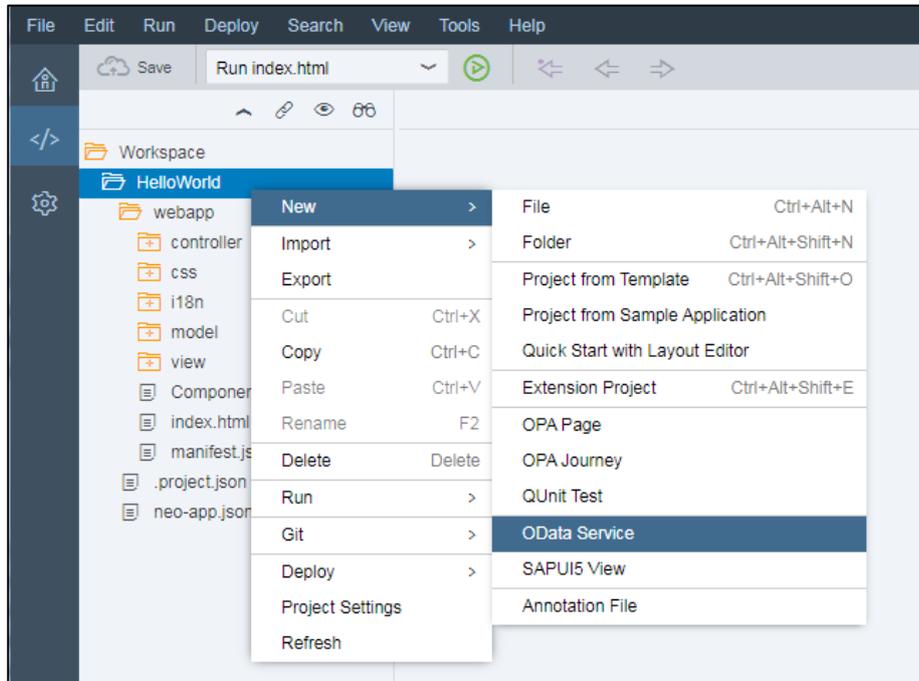
Or - for easy copying:

```
#ServiceDestination
Description=System NPL
Type=HTTP
TrustAll=true
Authentication=NoAuthentication
Name=NPL
sap-client=001
ProxyType=Internet
URL=https://localhost:8022
WebIDEUsage=odata_abap,ui5_execute_abap,dev_abap
WebIDESystem=NPL
WebIDEEnabled=true
```

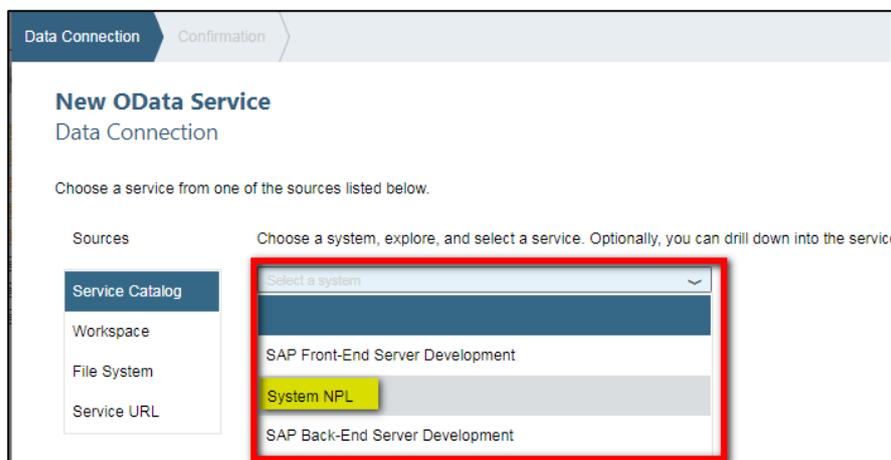
Highlighted in yellow above are the individual settings that need to be customized for a custom SAP system (SID, client, HTTP access). Marked in blue are the purposes that must be specified according to Quick S32-05-02 - *CloudConnector configuration*.

**Attention!** Testing the correct setup of the destinations only makes sense if you know from Unit S32-04 - SAP WebIDE how to set up a SAP WebIDE project.

To test the correct setup, a project should already be created. For this project an oData service must be defined via the context menu:: *New -> OData-Service*.



In the next screen, the entry *Service Catalog* is selected in the *Sources* box and then the destination defined by file is selected in the drop-down box on the right.



After a few moments, the connection should be established and the oData services available in the target system should be displayed. The test is now complete and the desired target system has been reached.

**Data Connection** Confirmation

### New OData Service

Data Connection

Choose a service from one of the sources listed below.

Sources Choose a system, explore, and select a service. Optionally, you can drill down into the service details.

Service Catalog  
Workspace  
File System  
Service URL

System NPL

Service Search Service Show De

Service	Description	System
> ADT_SRV	Gatewav-Servic...	NPL
> CATALOGSERVICE	CATALOGSER...	NPL
> CATALOGSERVICE	CATALOGSER...	NPL
> DAAG_MNGGRP	Data-Acino-Gru...	NPL

## Sources

- SAP Documentation  
<https://help.sap.com/viewer/825270ffffe74d9f988a0f0066ad59f0/CF/en-US/48238c70014540b4b8fccdf8cf456a92.html>
- Installing SAPWebIDE Personal Edition and connect it to a System  
<https://blogs.sap.com/2018/03/29/installing-sapwebide-personal-edition-and-connect-it-to-a-system/>
- SAP Web IDE Personal Edition How To: Add a new UI5 Version  
<https://blogs.sap.com/2018/10/17/sap-web-ide-personal-edition-how-to-add-a-new-ui5-version/>
- Orion Server Admin Guide  
[https://wiki.eclipse.org/Orion/Server\\_admin\\_guide](https://wiki.eclipse.org/Orion/Server_admin_guide)
- OPEN UI5 Documentation  
<https://openui5.hana.ondemand.com/1.36.3/docs/guide/91f080966f4d1014b6dd926db0e91070.html>