



ADDITIONAL DOCUMENTATION

Introduction to SAPUI5

Course: S32 - SAPUI5

Unit: 04 - SAP WebIDE

Quick: S32-04-99 - Personal WebIDE

Discontinuation of Cloudplatform 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

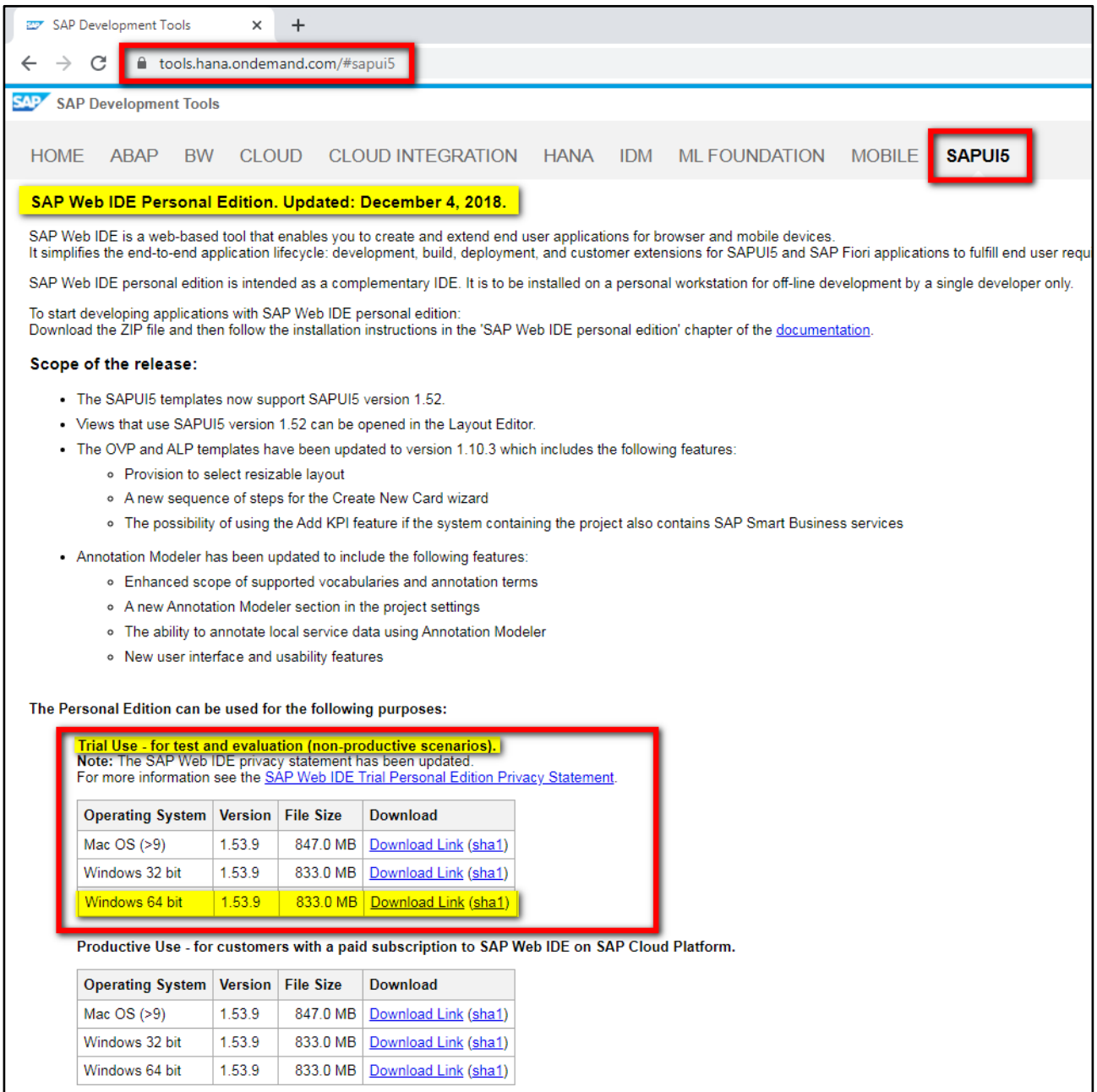
- For a **Mac** there is documentation by SAP:
<https://docplayer.net/20610363-H2g-install-sap-web-ide-locally-for-trial-mac-version.html>
- For **Linux** there is no documentation known to us.

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 screenshot shows the SAP Development Tools website. The browser address bar displays `tools.hana.ondemand.com/#sapui5`. The navigation menu includes links for HOME, ABAP, BW, CLOUD, CLOUD INTEGRATION, HANA, IDM, ML FOUNDATION, MOBILE, and SAPUI5 (which is highlighted). The main content area is titled "SAP Web IDE Personal Edition. Updated: December 4, 2018." and provides information about the tool's capabilities and release scope. A table lists download links for different operating systems and architectures, with the Windows 64 bit version highlighted.

SAP Web IDE Personal Edition. Updated: December 4, 2018.

SAP Web IDE is a web-based tool that enables you to create and extend end user applications for browser and mobile devices. It simplifies the end-to-end application lifecycle: development, build, deployment, and customer extensions for SAPUI5 and SAP Fiori applications to fulfill end user requirements.

SAP Web IDE personal edition is intended as a complementary IDE. It is to be installed on a personal workstation for off-line development by a single developer only.

To start developing applications with SAP Web IDE personal edition:
Download the ZIP file and then follow the installation instructions in the 'SAP Web IDE personal edition' chapter of the [documentation](#).

Scope of the release:

- The SAPUI5 templates now support SAPUI5 version 1.52.
- Views that use SAPUI5 version 1.52 can be opened in the Layout Editor.
- The OVP and ALP templates have been updated to version 1.10.3 which includes the following features:
 - Provision to select resizable layout
 - A new sequence of steps for the Create New Card wizard
 - The possibility of using the Add KPI feature if the system containing the project also contains SAP Smart Business services
- Annotation Modeler has been updated to include the following features:
 - Enhanced scope of supported vocabularies and annotation terms
 - A new Annotation Modeler section in the project settings
 - The ability to annotate local service data using Annotation Modeler
 - New user interface and usability features

The Personal Edition can be used for the following purposes:

Trial Use - for test and evaluation (non-productive scenarios).
Note: The SAP Web IDE privacy statement has been updated.
For more information see the [SAP Web IDE Trial Personal Edition Privacy Statement](#).

Operating System	Version	File Size	Download
Mac OS (>9)	1.53.9	847.0 MB	Download Link (sha1)
Windows 32 bit	1.53.9	833.0 MB	Download Link (sha1)
Windows 64 bit	1.53.9	833.0 MB	Download Link (sha1)

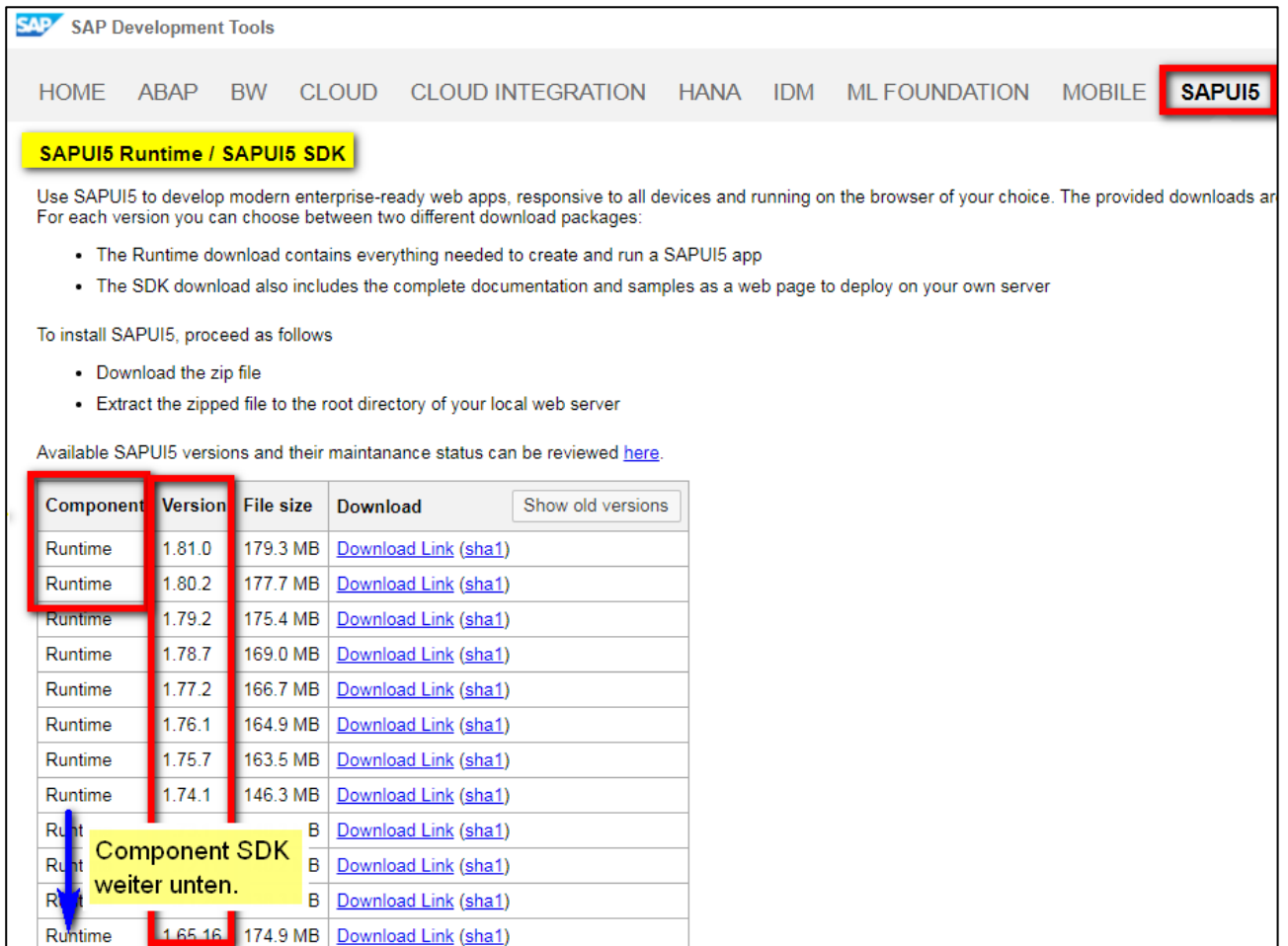
Productive Use - for customers with a paid subscription to SAP Web IDE on SAP Cloud Platform.

Operating System	Version	File Size	Download
Mac OS (>9)	1.53.9	847.0 MB	Download Link (sha1)
Windows 32 bit	1.53.9	833.0 MB	Download Link (sha1)
Windows 64 bit	1.53.9	833.0 MB	Download Link (sha1)

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	Download Link (sha1)	
Runtime	1.80.2	177.7 MB	Download Link (sha1)	
Runtime	1.79.2	175.4 MB	Download Link (sha1)	
Runtime	1.78.7	169.0 MB	Download Link (sha1)	
Runtime	1.77.2	166.7 MB	Download Link (sha1)	
Runtime	1.76.1	164.9 MB	Download Link (sha1)	
Runtime	1.75.7	163.5 MB	Download Link (sha1)	
Runtime	1.74.1	146.3 MB	Download Link (sha1)	
Runtime	1.65.16	174.9 MB	Download Link (sha1)	

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.

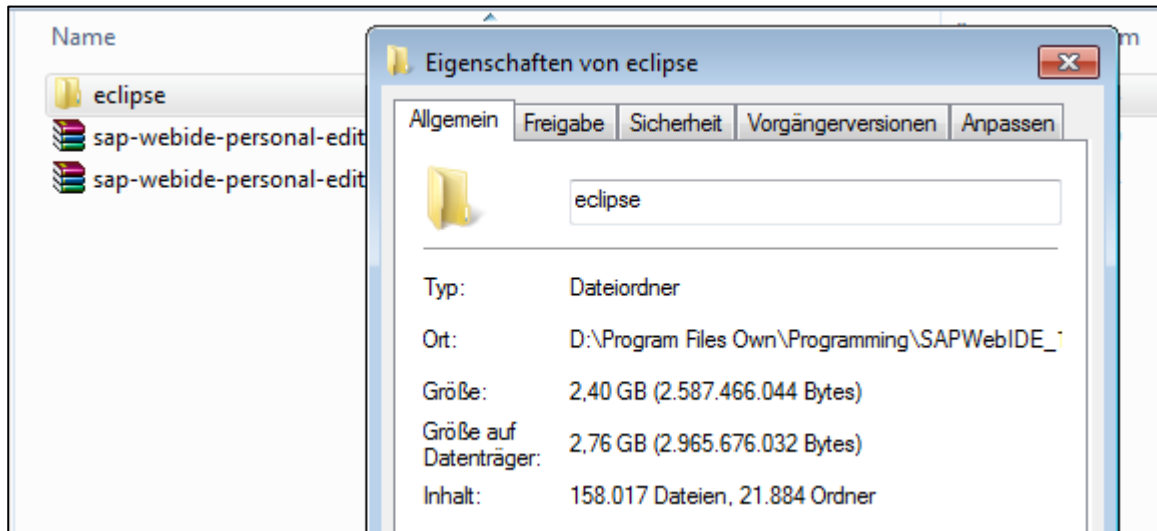
Also Java at least in version 1.7 is required. If necessary, this must be downloaded and installed beforehand.

Installation of SAP WebIDE Personal Edition

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

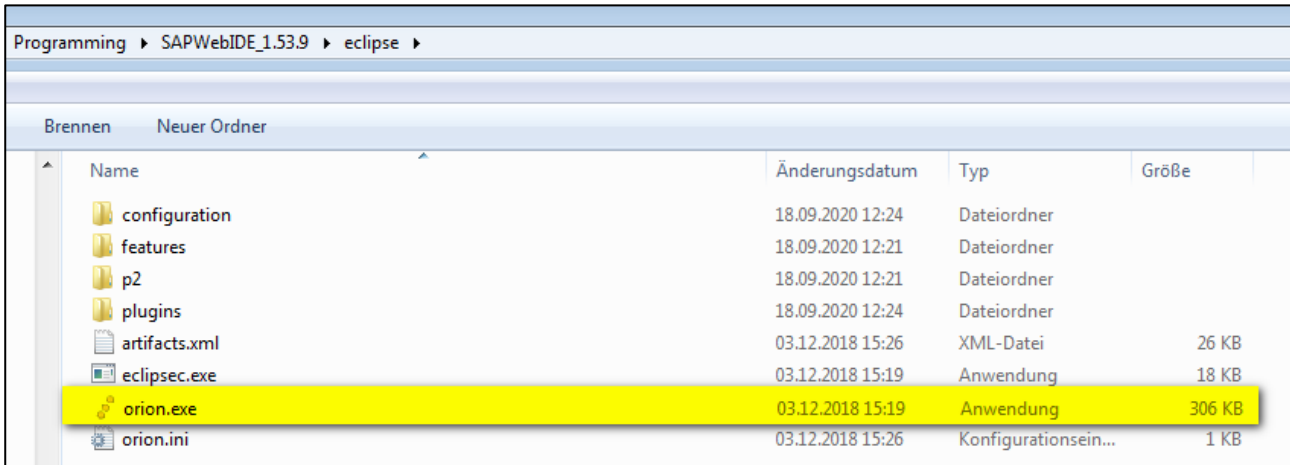
Attention! Some of the files exceed the limited length of file names allowed by Windows. It must be ensured that the unpacker can handle long file names!

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



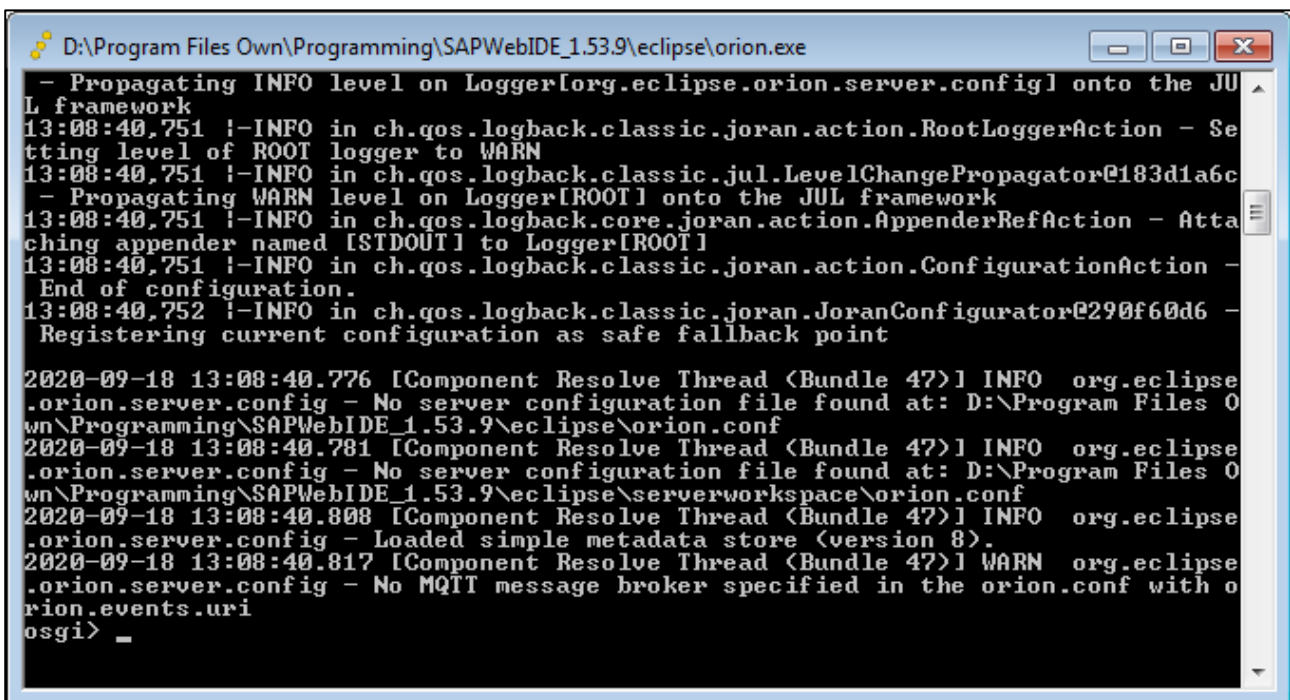
Starting the SAP WebIDE Personal Edition

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



Name	Änderungsdatum	Typ	Größe
configuration	18.09.2020 12:24	Dateiordner	
features	18.09.2020 12:21	Dateiordner	
p2	18.09.2020 12:21	Dateiordner	
plugins	18.09.2020 12:24	Dateiordner	
artifacts.xml	03.12.2018 15:26	XML-Datei	26 KB
eclipsec.exe	03.12.2018 15:19	Anwendung	18 KB
orion.exe	03.12.2018 15:19	Anwendung	306 KB
orion.ini	03.12.2018 15:26	Konfigurationsein...	1 KB

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.



```

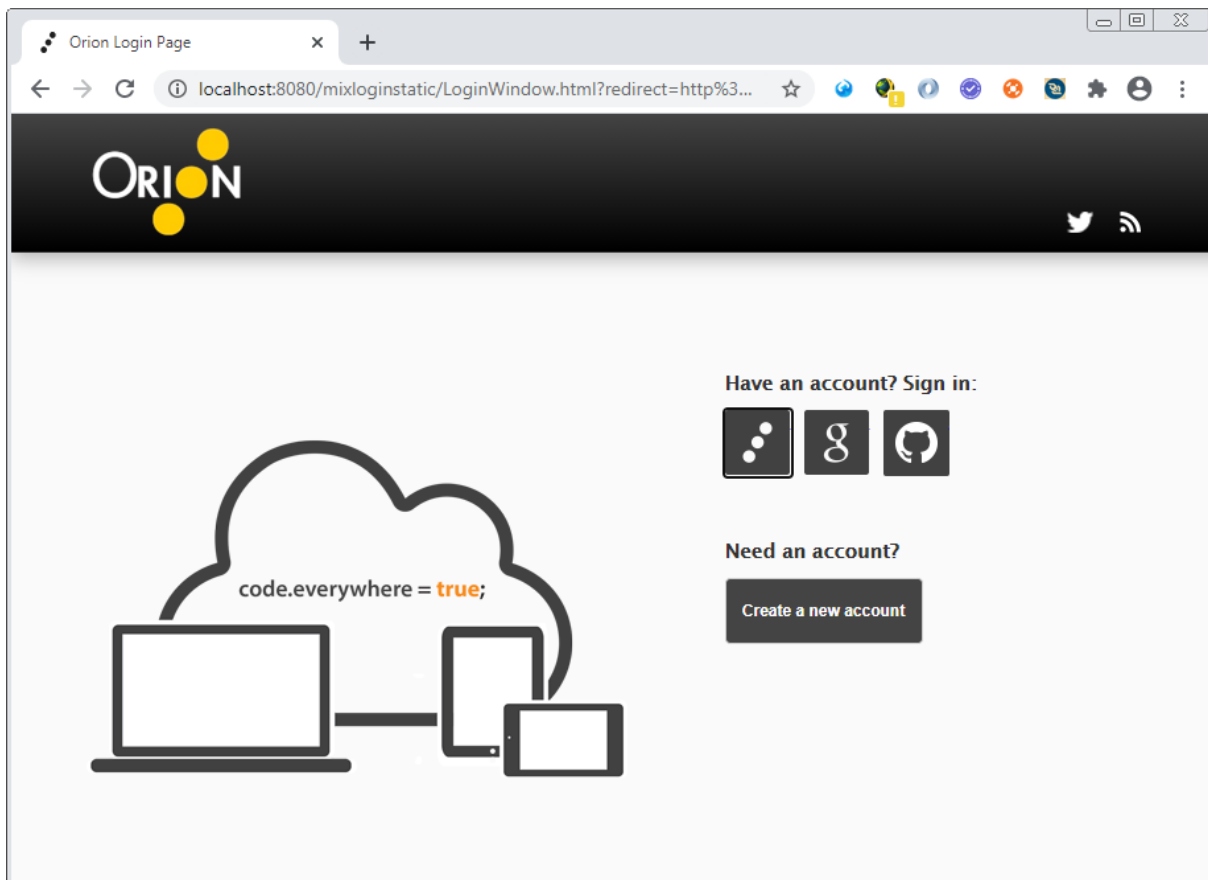
D:\Program Files Own\Programming\SAPWebIDE_1.53.9\eclipse\orion.exe
- Propagating INFO level on Logger[org.eclipse.orion.server.config] onto the JUL framework
13:08:40,751 !-INFO in ch.qos.logback.classic.joran.action.RootLoggerAction - Setting level of ROOT logger to WARN
13:08:40,751 !-INFO in ch.qos.logback.classic.jul.LevelChangePropagator@c183d1a6c - Propagating WARN level on Logger[ROOT] onto the JUL framework
13:08:40,751 !-INFO in ch.qos.logback.core.joran.action.AppenderRefAction - Attaching appender named [STDOUT] to Logger[ROOT]
13:08:40,751 !-INFO in ch.qos.logback.classic.joran.action.ConfigurationAction - End of configuration.
13:08:40,752 !-INFO in ch.qos.logback.classic.joran.JoranConfigurator@c290f60d6 - Registering current configuration as safe fallback point

2020-09-18 13:08:40.776 [Component Resolve Thread <Bundle 47>] INFO org.eclipse.orion.server.config - No server configuration file found at: D:\Program Files Own\Programming\SAPWebIDE_1.53.9\eclipse\orion.conf
2020-09-18 13:08:40.781 [Component Resolve Thread <Bundle 47>] INFO org.eclipse.orion.server.config - No server configuration file found at: D:\Program Files Own\Programming\SAPWebIDE_1.53.9\eclipse\serverworkspace\orion.conf
2020-09-18 13:08:40.808 [Component Resolve Thread <Bundle 47>] INFO org.eclipse.orion.server.config - Loaded simple metadata store (version 8).
2020-09-18 13:08:40.817 [Component Resolve Thread <Bundle 47>] WARN org.eclipse.orion.server.config - No MQTT message broker specified in the orion.conf with orion.events.uri
osgi> _
  
```

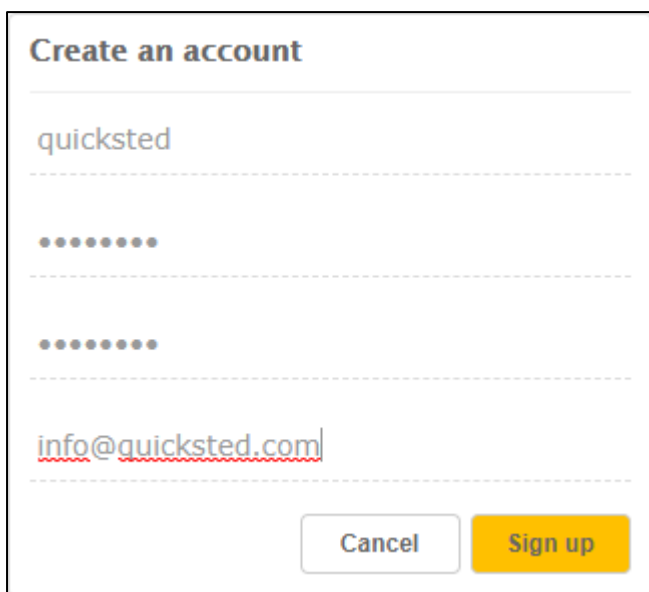
Most of the error messages in this window are negligible and need not be pursued further.

Access to the development environment can be obtained via the link

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

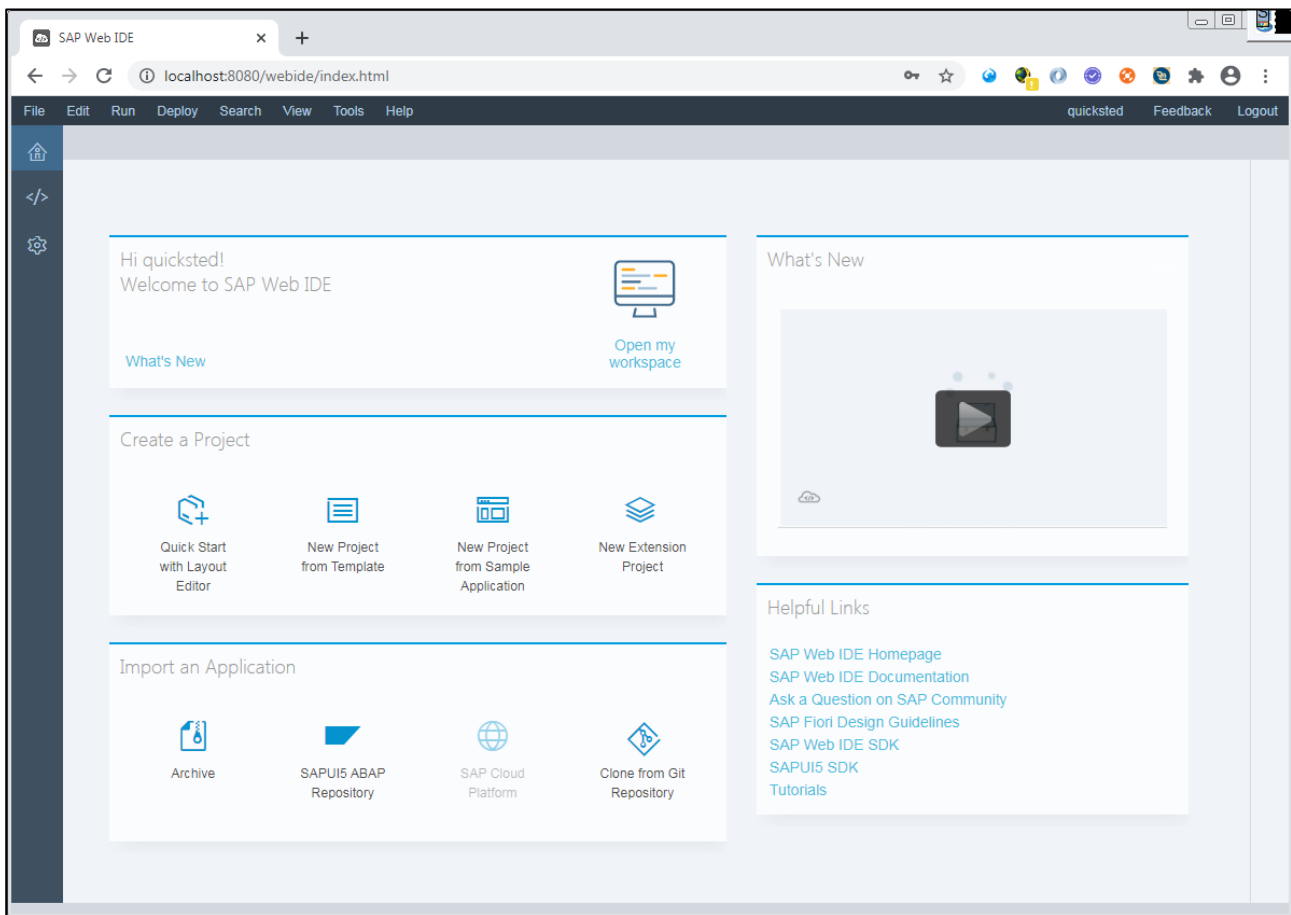


An account must now be created.



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).

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
eclipse.exe	03.12.2018 15:19	Anwendung	18 KB
orion.conf	18.09.2020 13:26	CONF-Datei	0 KB
orion.exe	03.12.2018 15:19	Anwendung	306 KB
orion.ini	03.12.2018 15:26	Konfigurationsein...	1 KB

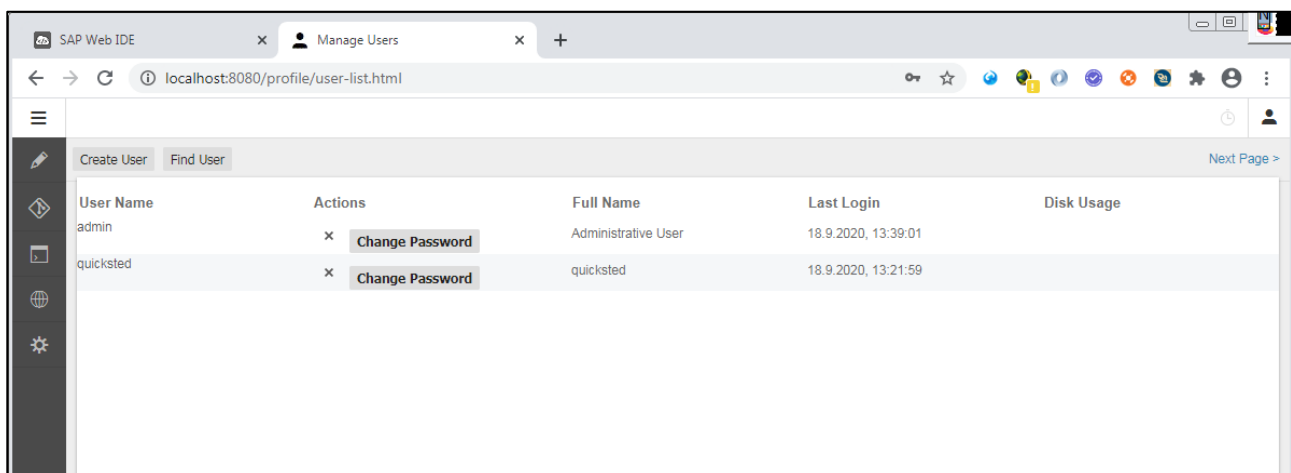
One line is entered in this file:

```
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:

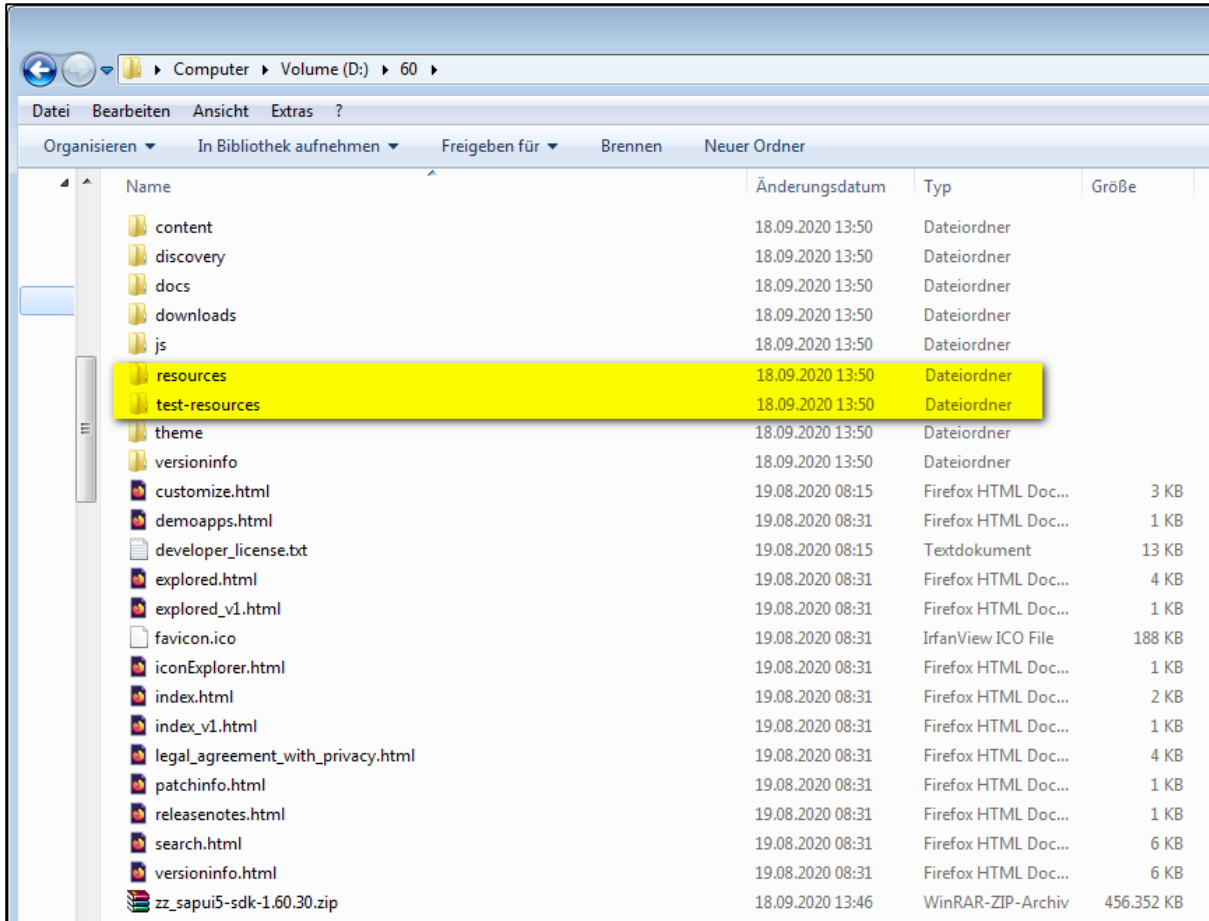
<http://localhost:8080/profile/user-list.html>



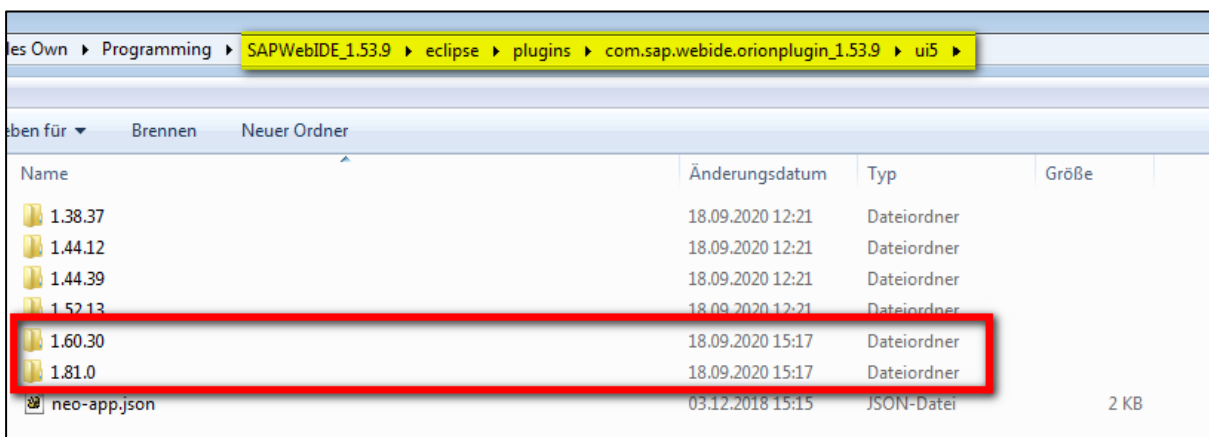
User Name	Actions	Full Name	Last Login	Disk Usage
admin	× Change Password	Administrative User	18.9.2020, 13:39:01	
quicksted	× Change Password	quicksted	18.9.2020, 13:21:59	

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.

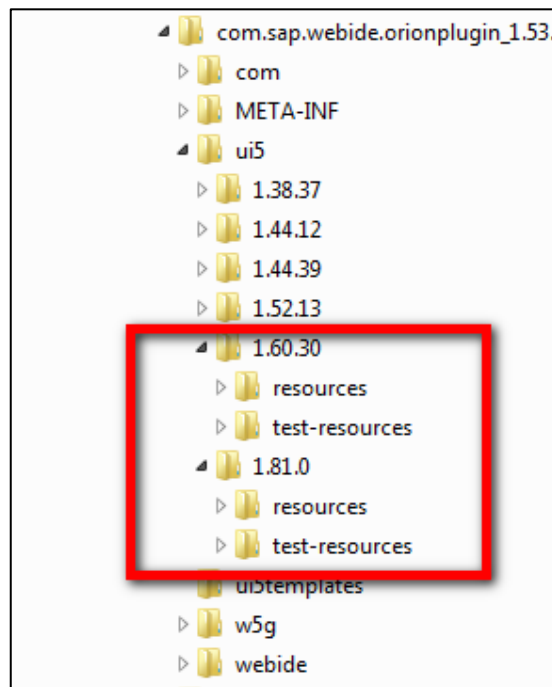


Of these files, only the two folders *resources* and *test-resources* are interesting. All other folders and files can be deleted.



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:

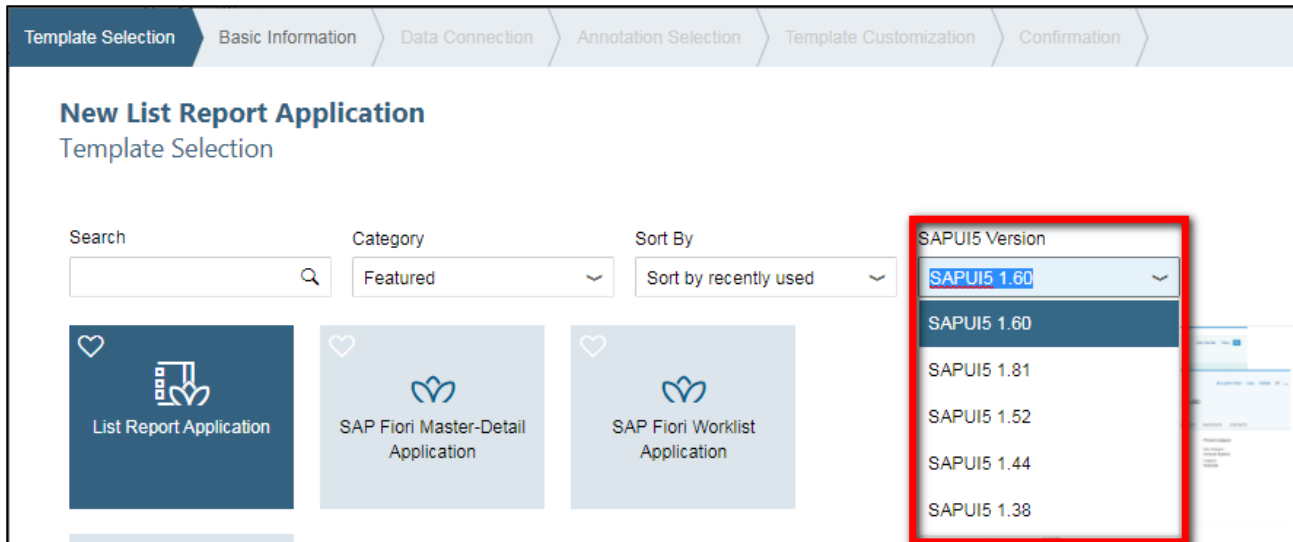


Name	Änderungsdatum	Typ	Größe
versionoverview.json	03.12.2018 15:15	JSON-Datei	1 KB

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
```

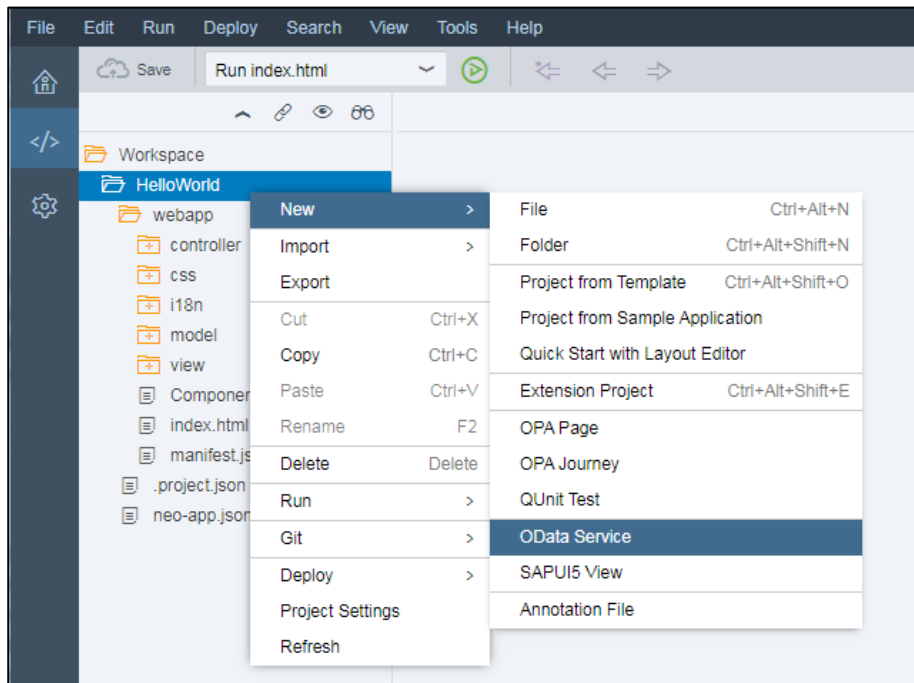
Or - for easy copying:

```
#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
```

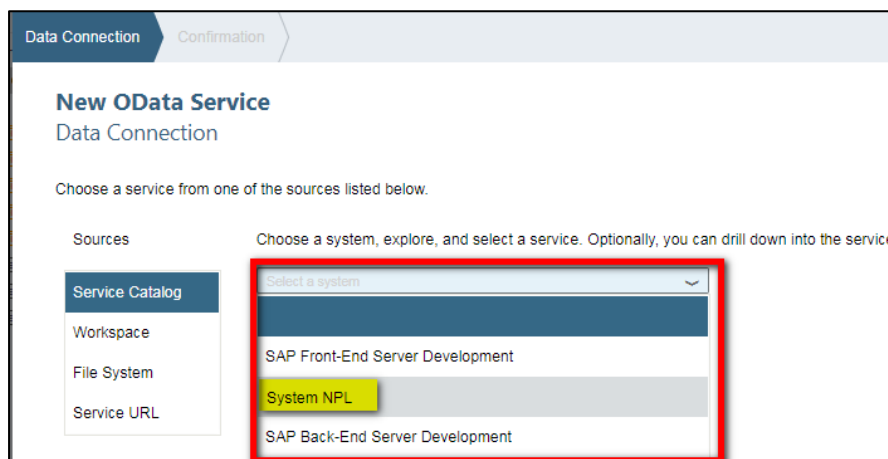
Highlighted in yellow above are the individual settings that need to be customized for a custom SAP system (SID, client, HTTP access). Marked in blue are the purposes that must be specified according to Quick S32-05-02 - *CloudConnector configuration*.

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

Service	Description	System
>  ADT_SRV	Gateway-Service...	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
- OPEN UI5 Documentation
<https://openui5.hana.ondemand.com/1.36.3/docs/guide/91f080966f4d1014b6dd926db0e91070.html>