

svnAPEX 1.2 Documentation

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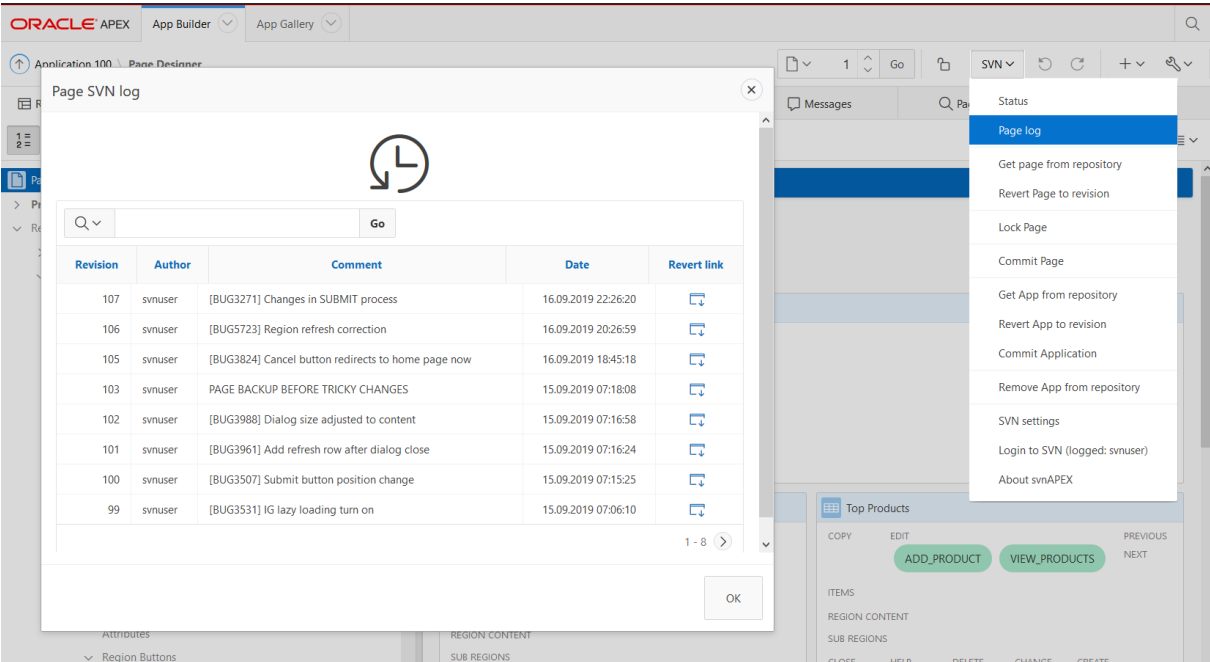
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Info

This is documentation for svnAPEX tool – extension of Oracle APEX Application Builder that adds connectivity to Subversion source management system and adds SVN menu with common SVN commands available directly in Application Builder. See more at <http://svnape.com/>



Requirements for on-premises installation

You have to meet the following requirement to install and use svnAPEX 1.2:

Operating System general requirements for Database Server	Linux 7.4 SVN command line 1.8 or later Bash shell available Network connection from Oracle Database server machine to any SVN server used in svnAPEX Restricted, dedicated OS user for running SVN scripts is recommended Access to command line shell on database server (during installation only) is required (possibly with SSH)
Oracle Database general requirements	Oracle Database 11g or later
Oracle Application Express general requirements	Oracle APEX 5.1 or later
SVN Server general requirements	SVN server compatible with SVN command line version 1.8
User browser requirements	Firefox browser version 70 or later or Google Chrome version 78.0.3904 or later
Required privileges and access during installation	<ol style="list-style-type: none">1. Oracle APEX workspace ADMIN user access2. Database server machine root access (optional)3. Command prompt access to database server machine
Required privileges and access during usage of svnAPEX	<ol style="list-style-type: none">1. Developer access rights to WORKSPACE where svnAPEX is installed2. Possibility to install Firefox add-on or Google Chrome Extension

Quick installation steps for on-premises installation

Please follow these steps for quick installation of svnAPEX in your own hosted APEX environment.

1. Install svnAPEX application using import functionality of Oracle APEX. Only one svnAPEX application is allowed in single Workspace and schema assigned to that Workspace.
2. Run svnAPEX application in a browser (Chrome or Firefox)
3. Click "Download shell files" button in svnAPEX application to get zip archive with files used by svnAPEX.

This shell scripts need to be uploaded into the database server and it will be run by svnAPEX on database server to prepare files, connect to repository and perform svn operations. We use External Jobs internally.

4. To isolate shell scripts from rest of the system we recommend usage of dedicated OS user on database machine server. Name of this user will be passed to SQL installation script in step 18. It is also possible to use any existing OS user – even OS user who is the owner of Oracle Database software (probably this is OS user named oracle). If you choose to use non-dedicated user (like oracle OS user) you can skip step 5 of installation however please note that this is non-recommended option.
5. To create dedicated OS user on database machine server (recommended):
 - a. Connect to shell on database server (using for example PuTTY or similar software) as root user
 - b. Use command `useradd` (or similar for your OS) to add dedicated OS user for svnAPEX:
Sample commands for bash shell:

```
useradd svnapex svnapexpwd
```
6. Connect to shell on database server as user chosen in step 4 or created in step 5. Do not use root user for that.
7. Verify installation of svn command line using command:

```
svn --version
```
8. If SVN command line is not installed on server - use package manager of your OS to install Subversion command line tools. Please note that user created in step 5 has no privileges to do that by default so privileged user (like root) should be used.

Sample command for privileged user:

```
sudo yum install subversion
```

9. Unzip archive downloaded in point 3 and transfer its content to a database machine server (using sftp or similar software) for example to `/opt/oracle/product/18c/dbhomeXE/apex_svn` (if you use oracle user) or `/home/svnapex/apex_svn` (if you use dedicated OS user)

Important! Please don't delete sub-directories `params` and `tmp`

10. Set executable permission for all files `*.sh` in scripts sub-directory
Sample commands for bash shell:

```
cd /home/svnapex/apex_svn  
chmod u+x /home/svnapex/apex_svn/scripts/*.sh
```

11. Set read and write permissions to `params` and `tmp` directories

Sample commands for bash shell:

```
chmod g+rw /home/svnapex/apex_svn/params
```

```
chmod g+rw /home/svnapex/apex_svn/tmp
```

12. Make sure all directories in path has rx privileges for group
13. Make sure there are no symbolic links in the path (due to ORA-29283: invalid file operation: path traverses a symlink for 18c+)
14. Make sure directories in the path are accessible by group that is Oracle software owner (like for example oinstall group). You can change directory group assignment using chgrp, however to do that usage of privileged user (root) might be required.

Sample commands for bash shell:

```
chgrp oinstall /home/svnapex
chgrp oinstall /home/svnapex/apex_svn
chgrp oinstall /home/svnapex/apex_svn/params
chgrp oinstall /home/svnapex/apex_svn/tmp
```

15. Go back to svnAPEX application and click "Download SQL script", save and transfer SQL script to database machine server
16. Go back to shell. Run SQL*Plus and login to database as user with DBA role
17. sqlplus [db_user]/[db_password]@[database_alias]
18. Run svnapex_install.sql script passing the following parameters:
 - a. path to shell files copied in step 9 (eq. /home/svnapex/apex_svn)
 - b. parsing schema for svnAPEX application (eq. SVNAPEX)
 - c. OS username used to run shell scripts (eq. svnapex)
 - d. OS user password used to run shell scripts. Please note that we recommend usage of dedicated restricted OS user as described in point 4

Sample command:

```
@svnapex_install /home/svnapex/apex_svn SVNAPEX svnapex svnapexpwd
```

19. Click "Install svnAPEX add-on" or "Install svnAPEX Chrome extension" button in svnAPEX application and follow browser instructions to install browser Add-on. This step must be repeated for every browser where svnAPEX will be used.
20. You should now be ready to use svnAPEX