Windchill Extension Test Plan

Extension Platform Validation Plan

Details	
Generated	2024/12/27 08:28
Group Id	com.wincomplm
Artifact Id	wex-platform-testplan-validation
Name	Extension Platform Validation Plan
Version	2.0
Beta	No
Windchill Version	13.0
Description	The platform within Windchill that manages extensions
System Extension	Yes

Test Definition Index

Overview & Setup							
ID	OV1	**Category**	Functional	**Security**	NA	**Execution**	Manual	**Reference**	

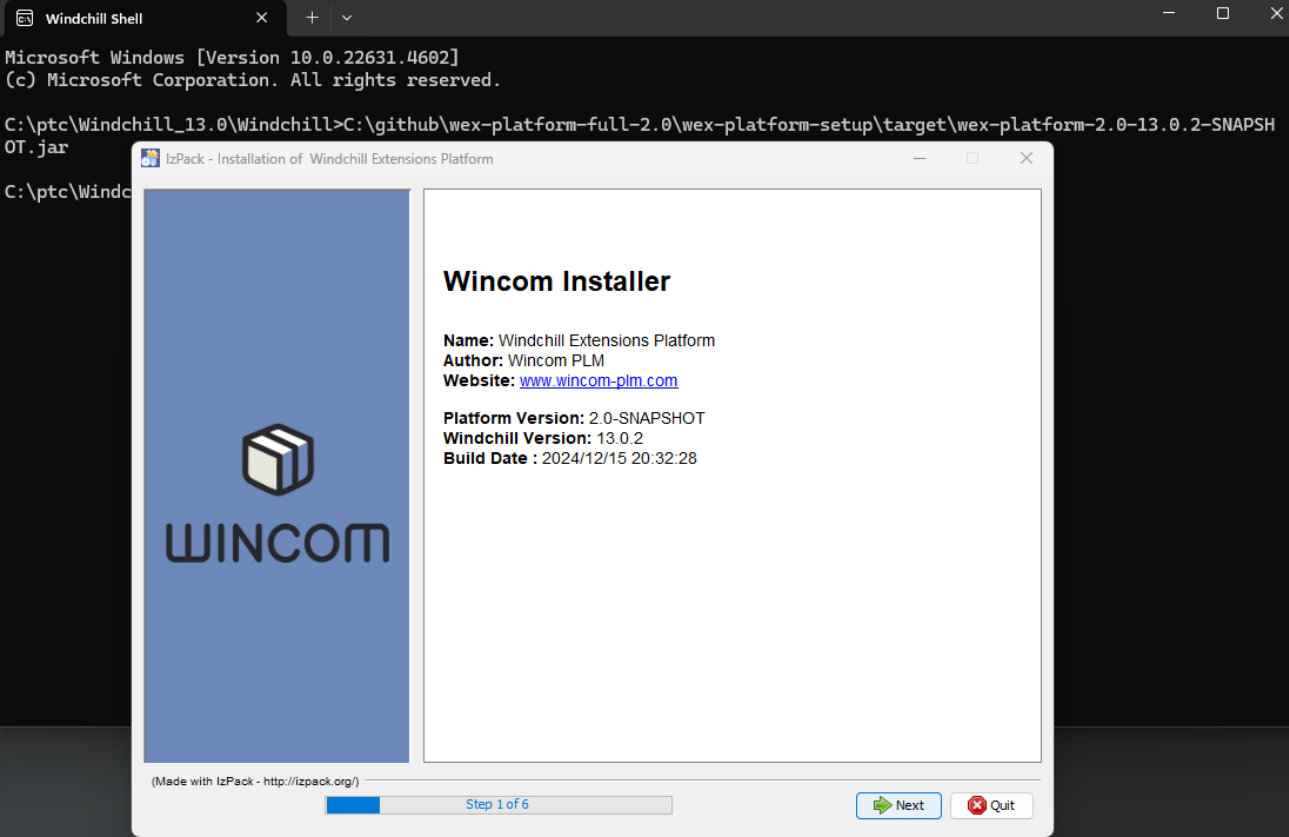| **Description** |
|---|

Version **2.0.1**
Windchill Version **13.0**

Click the link below to download the latest version of this test plan
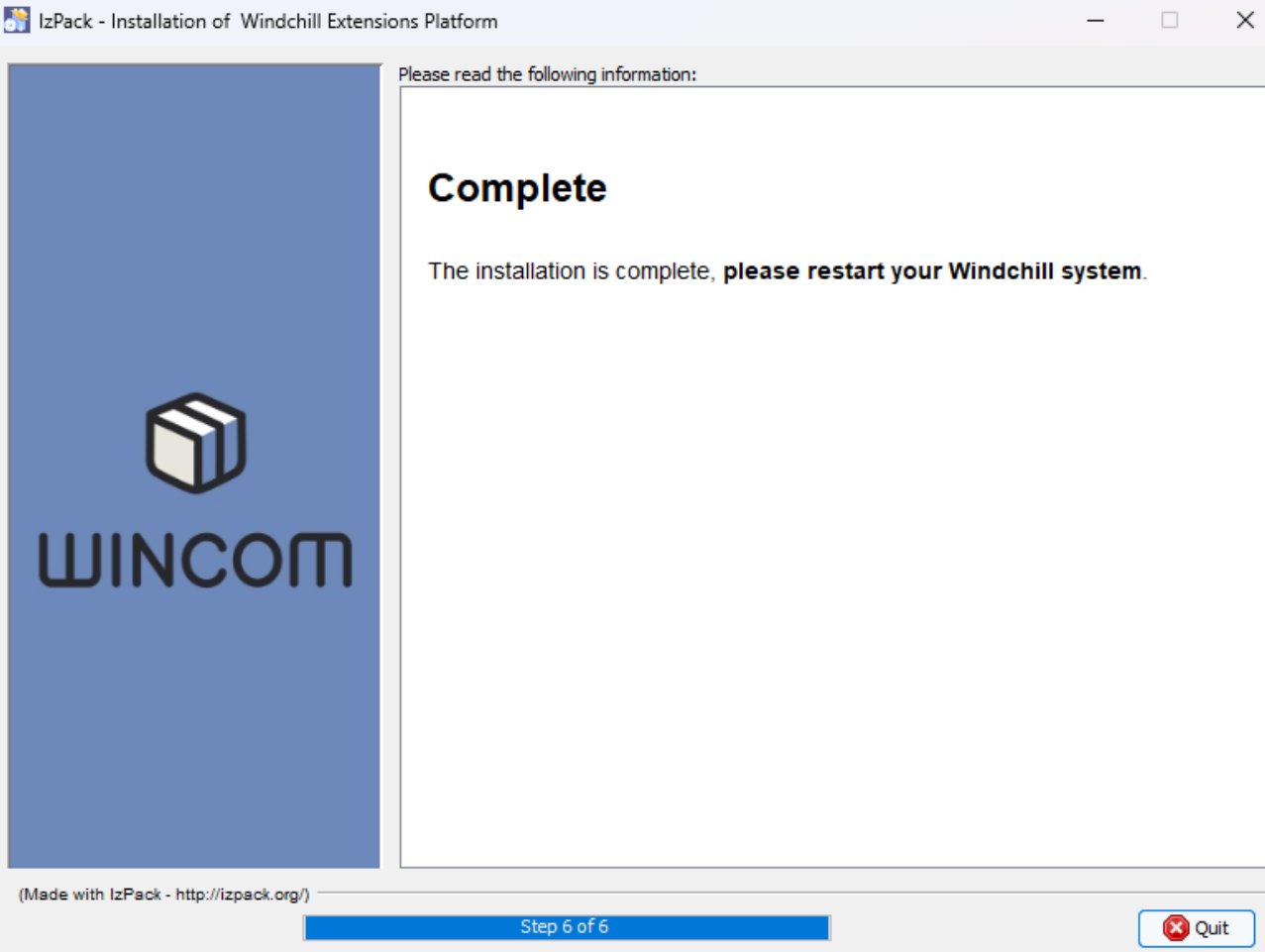
https://github.com/wincomplm/edk/raw/refs/heads/main/access/test-wexes/13.0/wex-platform-testplan-validation.release.testplan.pdf
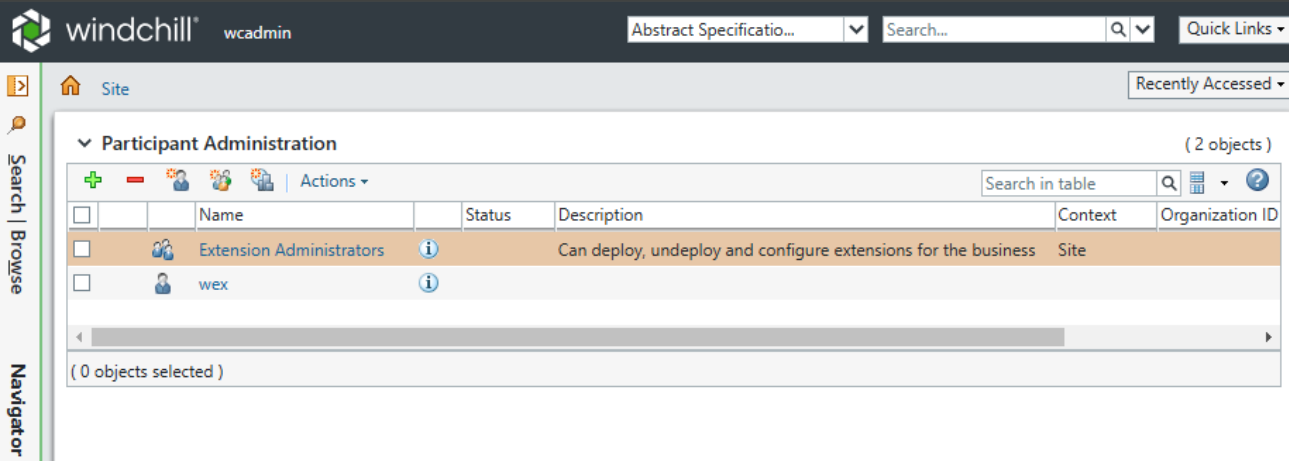
Testing for the new Wincom Extension Platform 2.0 features that will be included in Windchill.

This test plan is functional only and does not test security.
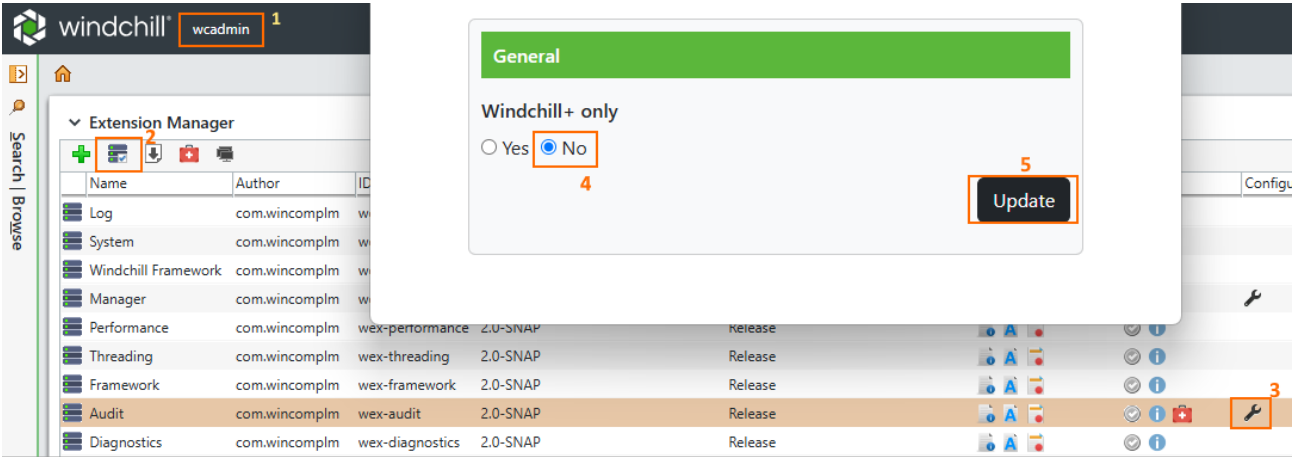
Overview
&
Setup

Overview & Setup							
ID	OV1	**Category**	Functional	**Security**	NA	**Execution**	Manual	**Reference**	

Description

Install test version

| ID | ST1 | **Category** | Functional | **Security** | NA | **Execution** | Manual | **Reference** | |

Description

Windchill will have the latest platform preinstalled but the latest version can be installed using the installer.

Actions

Download the installer and run it from a Windchill Shell

Click the link below to download the latest installer

https://github.com/wincomplm/edk/raw/refs/heads/main/access/test-wexes/13.0/wex-platform-2.0-13.0.2-SNAPSHOT.jar

Result

Install complete

Restart after install of new platform								
ID	ST2	Category	Functional	Security	NA	Execution	Manual	Reference

Description

Checking the server starts correctly after install

Actions

Restart server

Result

WINCOM

Create Wex Manager new user

ID	ST3	**Category**	Functional	**Security**	NA	**Execution**	Manual	**Reference**	

Description

We will use three users during the testing

+ Site Admin - Will be able to perform all functions including system configuration (wcadmin)
+ Extension Admin - A user that can deploy and undeploy approved extensions (wex)
+ Standard User - A user with no special privilages (nowex)

Actions

Create a new user (wex) and add them to this group
Create a new user (nowex) and **do not** add them to this group

Result

The Group Extension Administrators is present (does not need to be manually created)

Enable all extensions are allowed to be installed

ID	ST4	Category	Functional	Security	NA	Execution	Manual	Reference	

Description

Must be done as a site admin

Actions

Login as site admin and access the Extension Manager (1)
Access system extensions (2)
Access wex-audit configuration (3)
Change to Windchill+ to false (if not already) (4)
Update (5)

Result

Configuration updated

WINCOM

Manager								
ID	M1	**Category**	Functional	**Security**	NA	**Execution**	Manual	**Reference**
Description								

This section will test the manager exposed to nominated users and works as expected.
Test extensions are provided for 13.0

Extension Manager

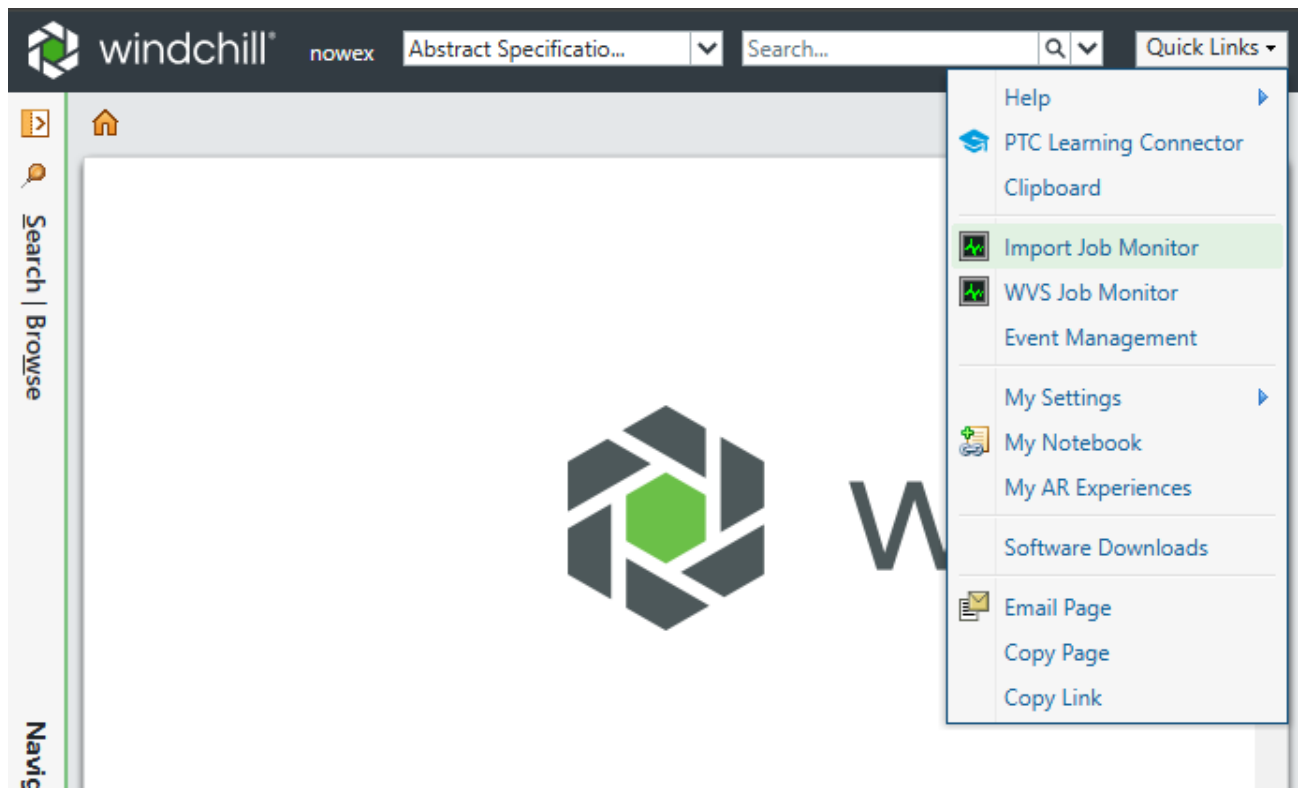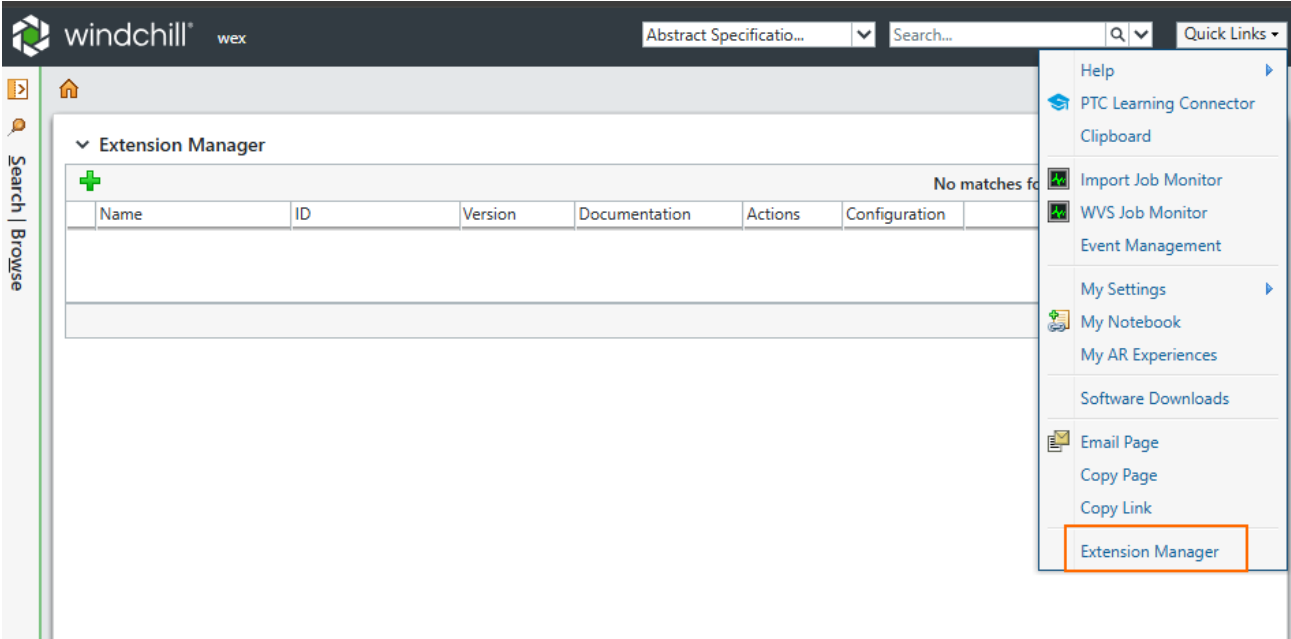| Check standard user has no access to the extension manager									
ID	M2	Category	Functional	Security	NA	Execution	Manual	Reference	

Description

Login as standard user (nowex)
Standard users, those not site admin or in the extension administrators group, do not see the manager

Actions

Access the quick links menu to ensure no manager is present

WINCOM

Check wex user has access to the extension manager

ID	M3	Category	Functional	Security	NA	Execution	Manual	Reference	

Description

Login as extension administrator (wex)
Wex admin users do see the manager

Actions

Access the quick links menu to ensure manager is present

Result

Check extension manager user can do an install of a signed extension

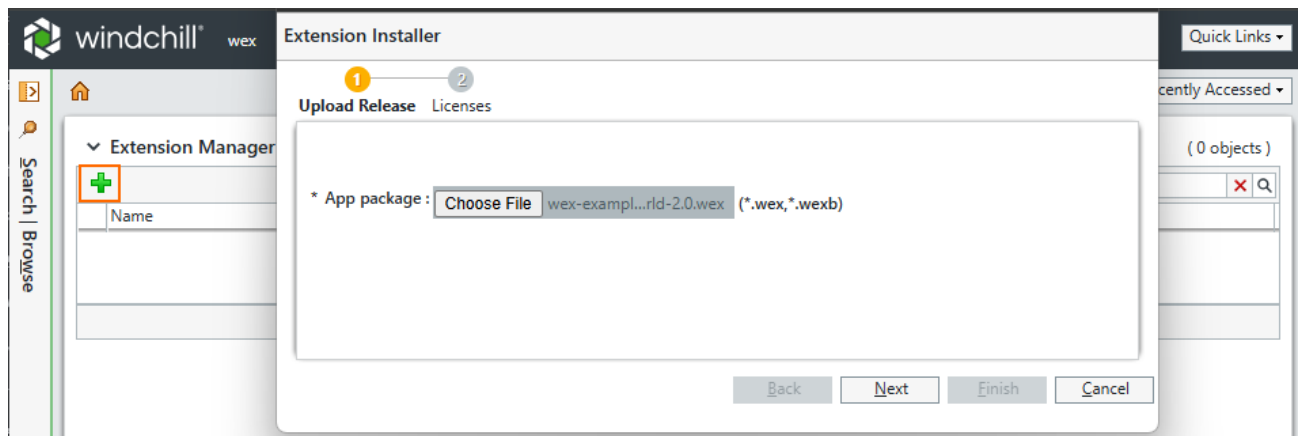| ID | M4 | Category | Functional | Security | NA | Execution | Manual | Reference | |

Description

At this point the extension manager may install any signed extension. This is restricted in a later test
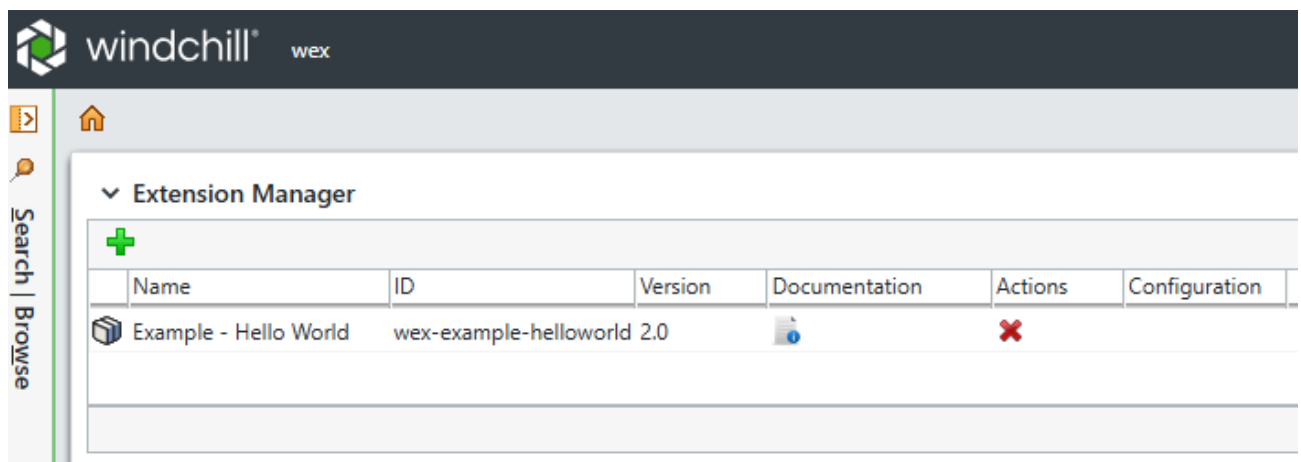
Actions

Download and deploy test extension

Click the link below to download the test extension

https://github.com/wincomplm/edk/raw/refs/heads/main/access/test-wexes/13.0/wex-example-helloworld-2.0-13.0.wex

Result

Installation is successfull

Undeploy an extension

ID	M5	Category	Functional	Security	NA	Execution	Manual	Reference	

Description

Undeploy the extension deployed in previous step

Actions

Result

WINCOM

Check extension manager user cannot do an install of a snapshot, beta or trial

| ID | M6 | Category | Functional | Security | NA | Execution | Manual | Reference | |

Description

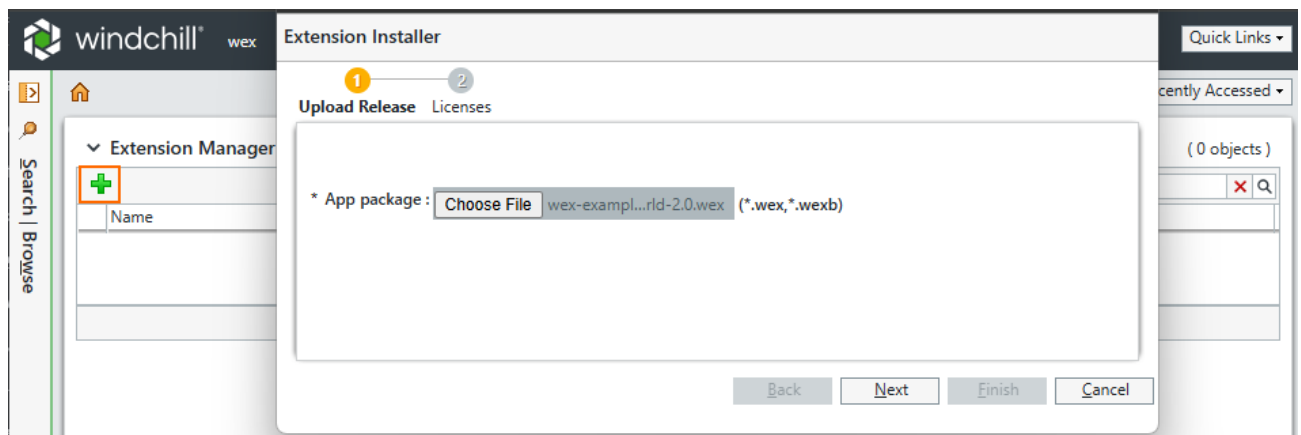These are only allowed to be installed by a site admin

Actions

Download and deploy snapshot test extension
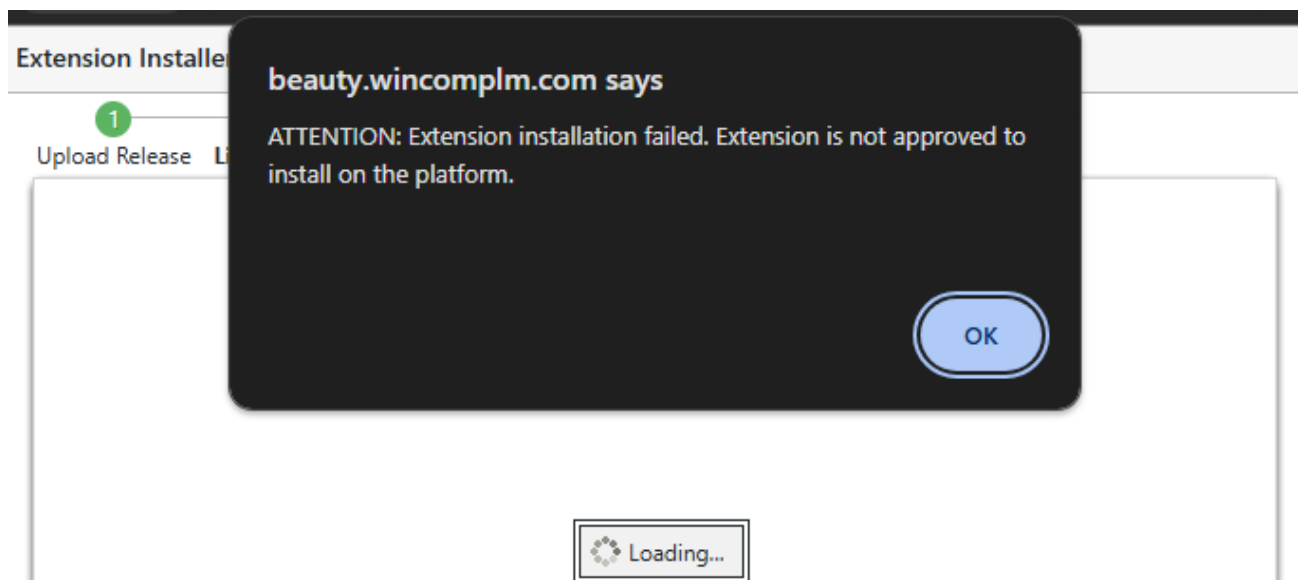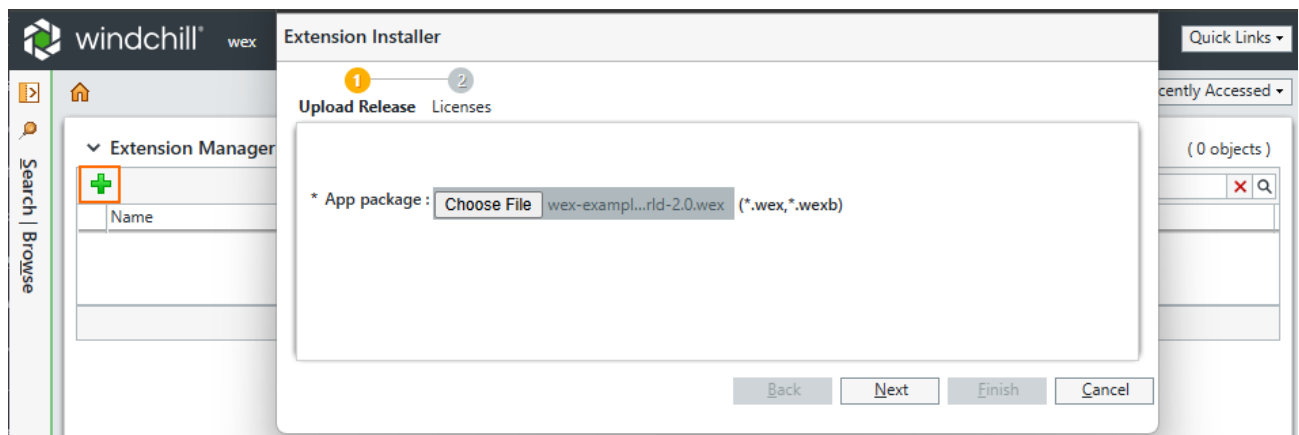
Click the link below to download the test extension

https://github.com/wincomplm/edk/raw/refs/heads/main/access/test-wexes/13.0/wex-example-helloworld-2.0-13.0-SNAPSHOT.wex
https://github.com/wincomplm/edk/raw/refs/heads/main/access/test-wexes/13.0/wex-example-helloworld-2.0-13.0-SNAPSHOT.wex

Result

Installation is unsuccessfull

WINCOM

Check extension manager user cannot install unsigned

ID	M7	**Category**	Functional	**Security**	NA	**Execution**	Manual	**Reference**	

Description

This test is a user trying to install a wex with a tampered definition file

Actions

Download and deploy test extension

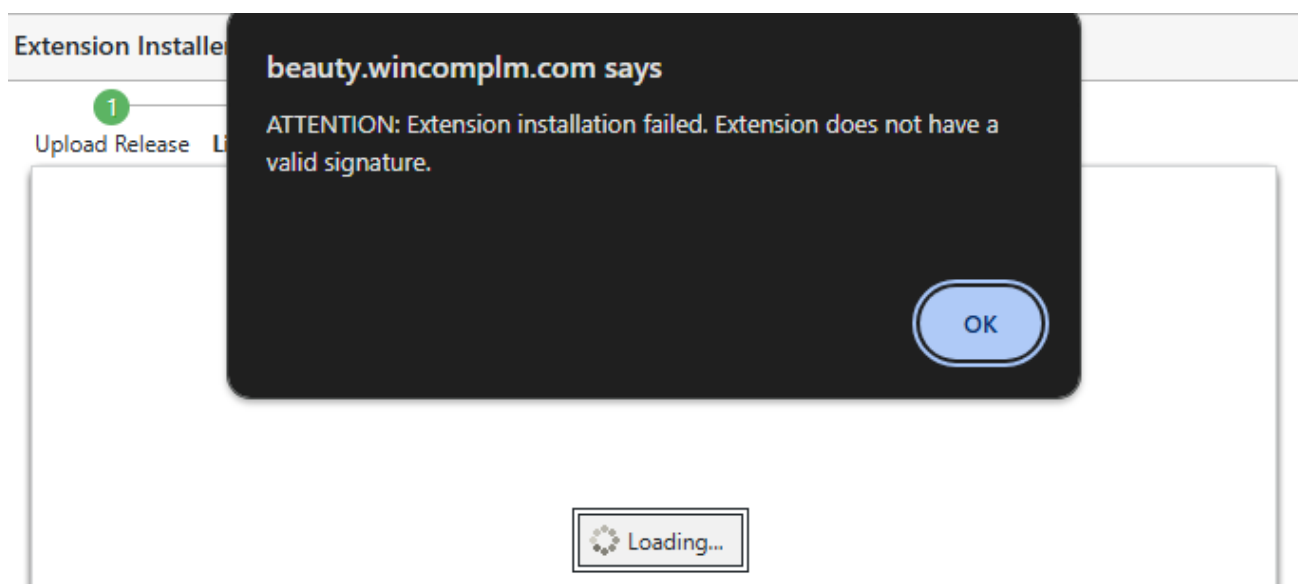Click the link below to download the test extension

https://github.com/wincomplm/edk/raw/refs/heads/main/access/test-wexes/13.0/wex-example-helloworld-2.0-13.0-badsignature.wex
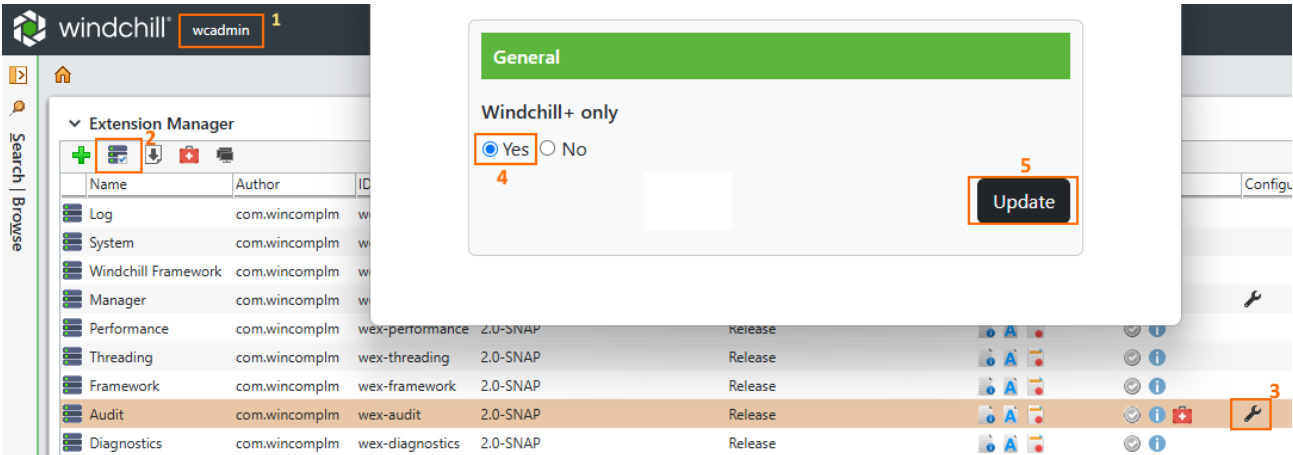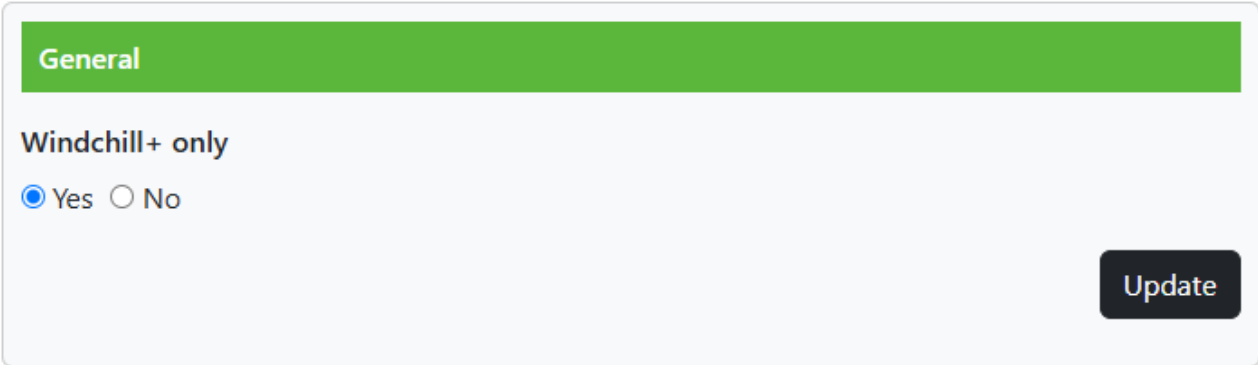https://github.com/wincomplm/edk/raw/refs/heads/main/access/test-wexes/13.0/wex-example-helloworld-2.0-13.0-badsignature.wex

Result

Installation is unsuccessfull

Enable only Windchill+ are allowed to be installed

| ID | M81 | Category | Functional | Security | NA | Execution | Manual | Reference | |

Description

To restrict the system to only allow extension managers to install Winchill+ approved extensions.
Must be done as a site admin

Actions

Login as site admin and access the Extension Manager (1)
Access system extensions (2)
Access wex-audit configuration (3)
Change to Windchill+ (4)
Update (5)

Result

Configuration updated

Check extension manager user cannot do an install of a non Windchill+ extension

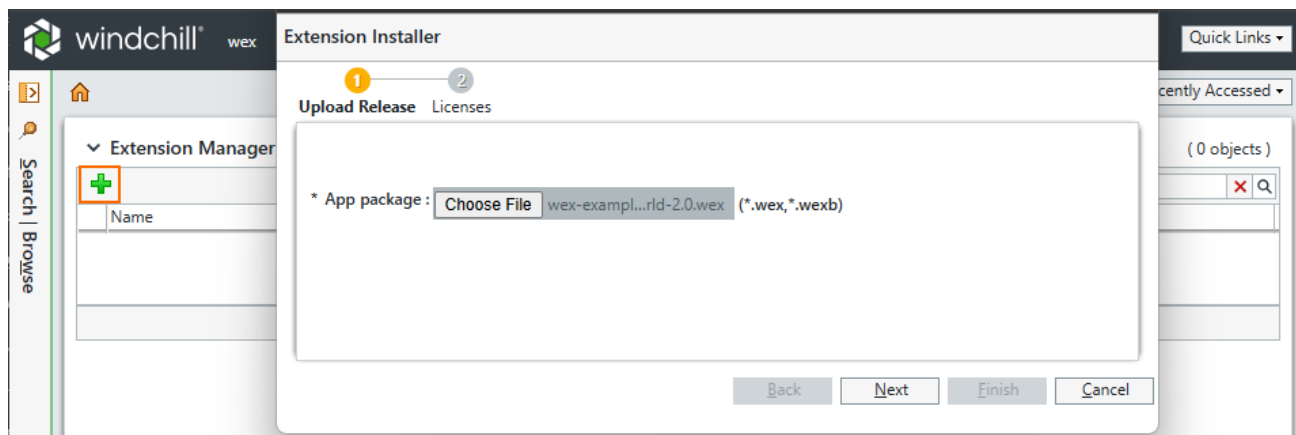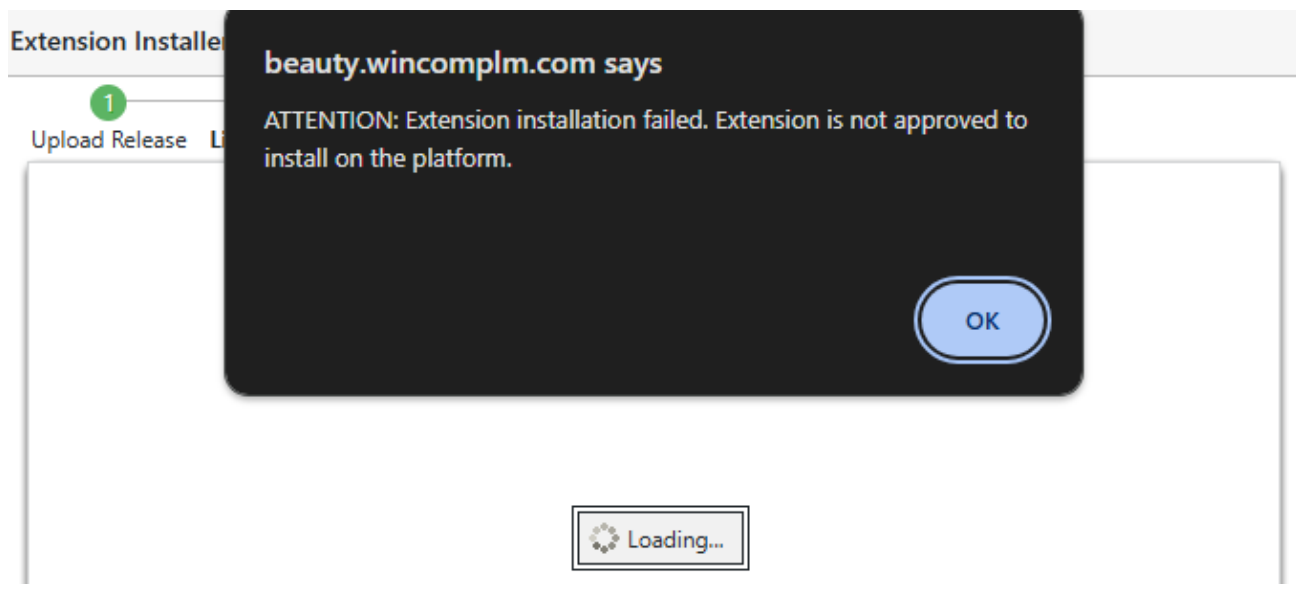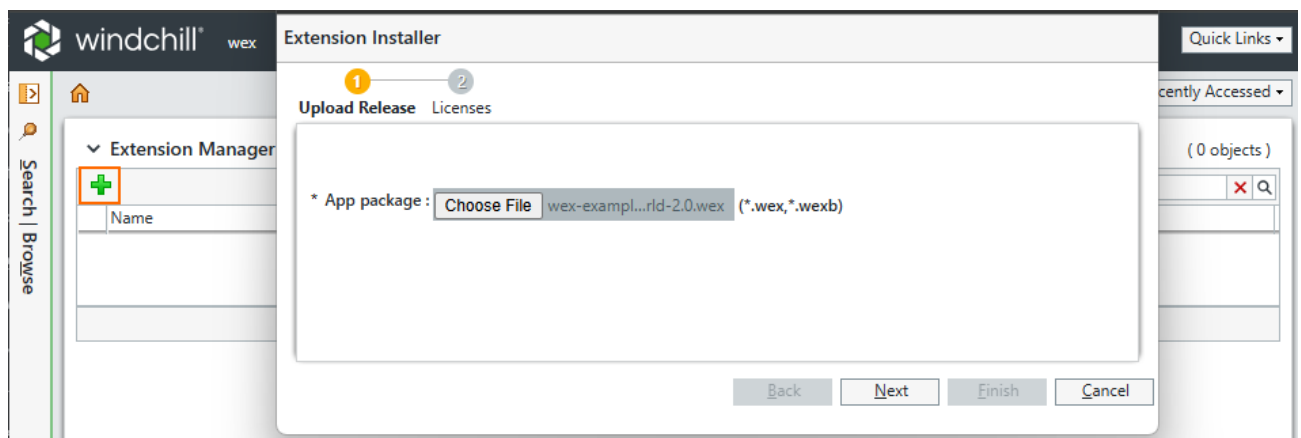| ID	M8	**Category**	Functional	**Security**	NA	**Execution**	Manual	**Reference**	

Description

User may not install

Actions

Download and deploy test extension

Click the link below to download the test extension

https://github.com/wincomplm/edk/raw/refs/heads/main/access/test-wexes/13.0/wex-example-helloworld-2.0-13.0.wex
https://github.com/wincomplm/edk/raw/refs/heads/main/access/test-wexes/13.0/wex-example-helloworld-2.0-13.0.wex

Result

Installation is unsuccessfull

Check extension manager user can do an install of an approved Windchill+ extension

ID	M9	Category	Functional	Security	NA	Execution	Manual	Reference	

Description

User may install approved extension

Actions

Download and deploy approved extension
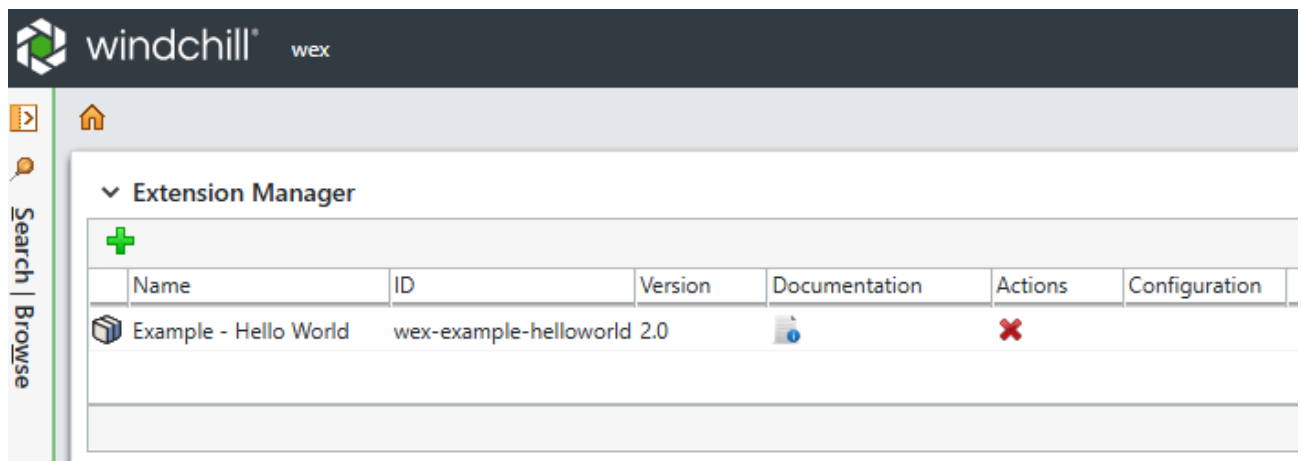
Click the link below to download the test extension

https://github.com/wincomplm/edk/raw/refs/heads/main/access/test-wexes/13.0/wex-example-helloworld-2.0-13.0-wcplus.wex
https://github.com/wincomplm/edk/raw/refs/heads/main/access/test-wexes/13.0/wex-example-helloworld-2.0-13.0-wcplus.wex

Result

Installation is successfull

WINCOM

Check extension is registered in DB

ID	M10	Category	Functional	Security	NA	Execution	Manual	Reference	

Description
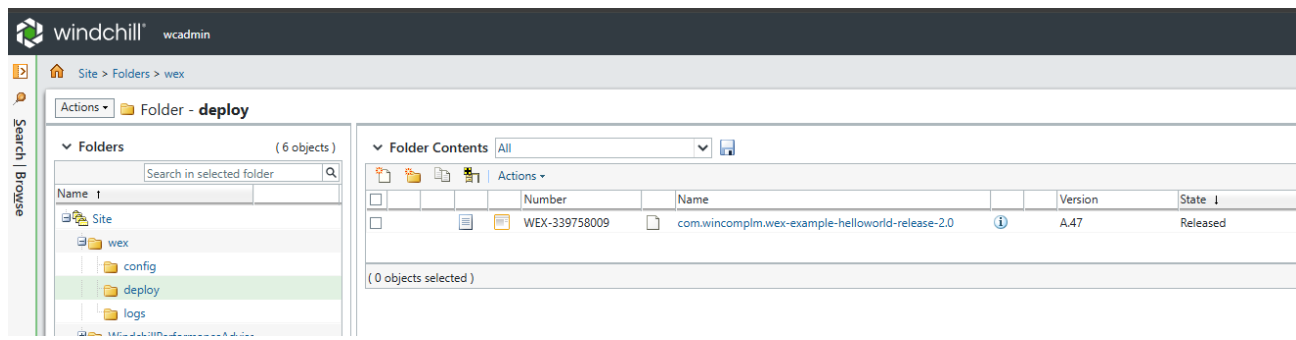
The extension should be in the DB as installed

Actions

As site admin, check the wex folders area
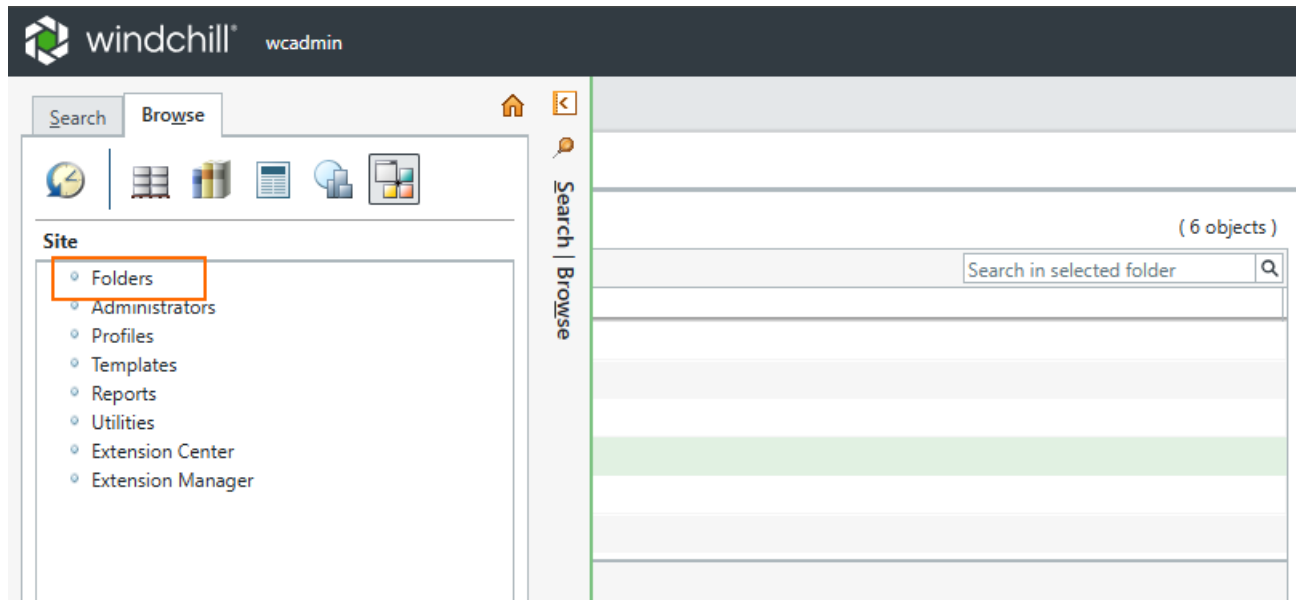
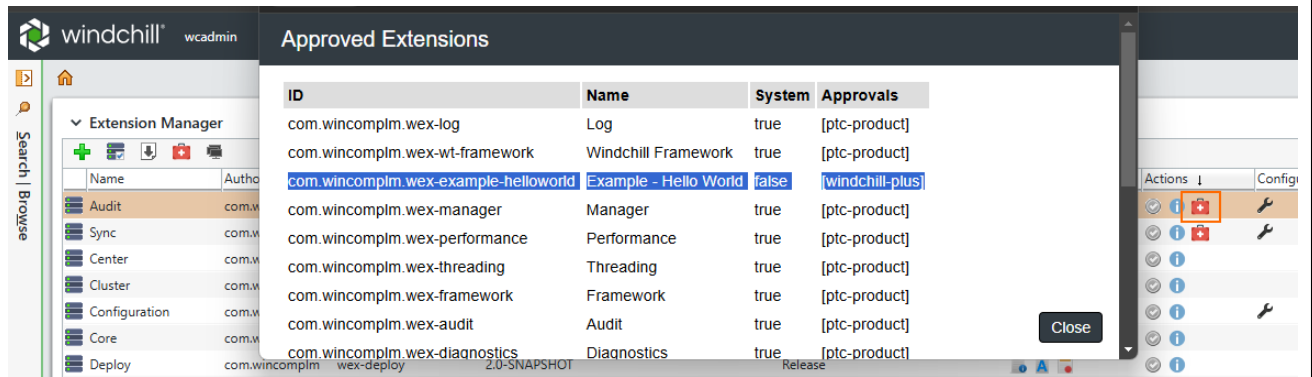### Result

Record is visible as Released

Check the audit show thie new extensions

| ID | M11 | Category | Functional | Security | NA | Execution | Manual | Reference | |

Description

The extension should be seen as Winchill+ approved in the diags, must be done as a site admin

Actions

Result

Record is visible

WINCOM

Undeploy and check unregistered in DB

ID	M13	Category	Functional	Security	NA	Execution	Manual	Reference	

Description

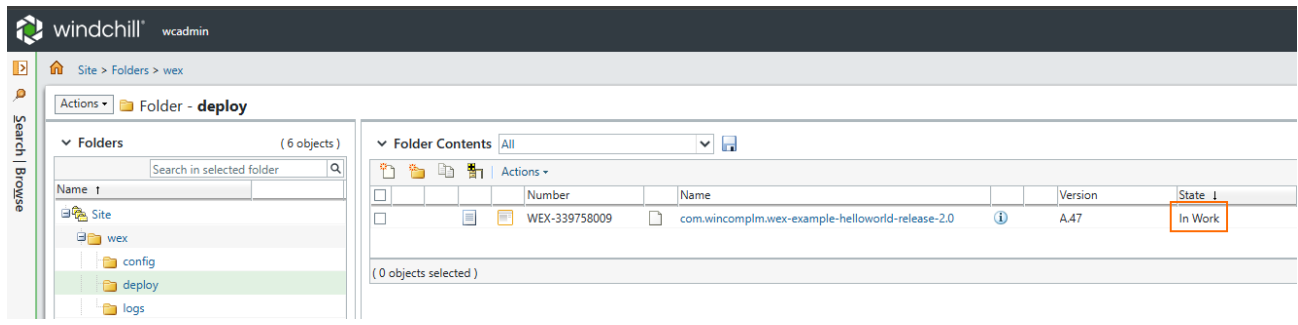The extension should be in the DB but as Inwork, must be done as a site admin

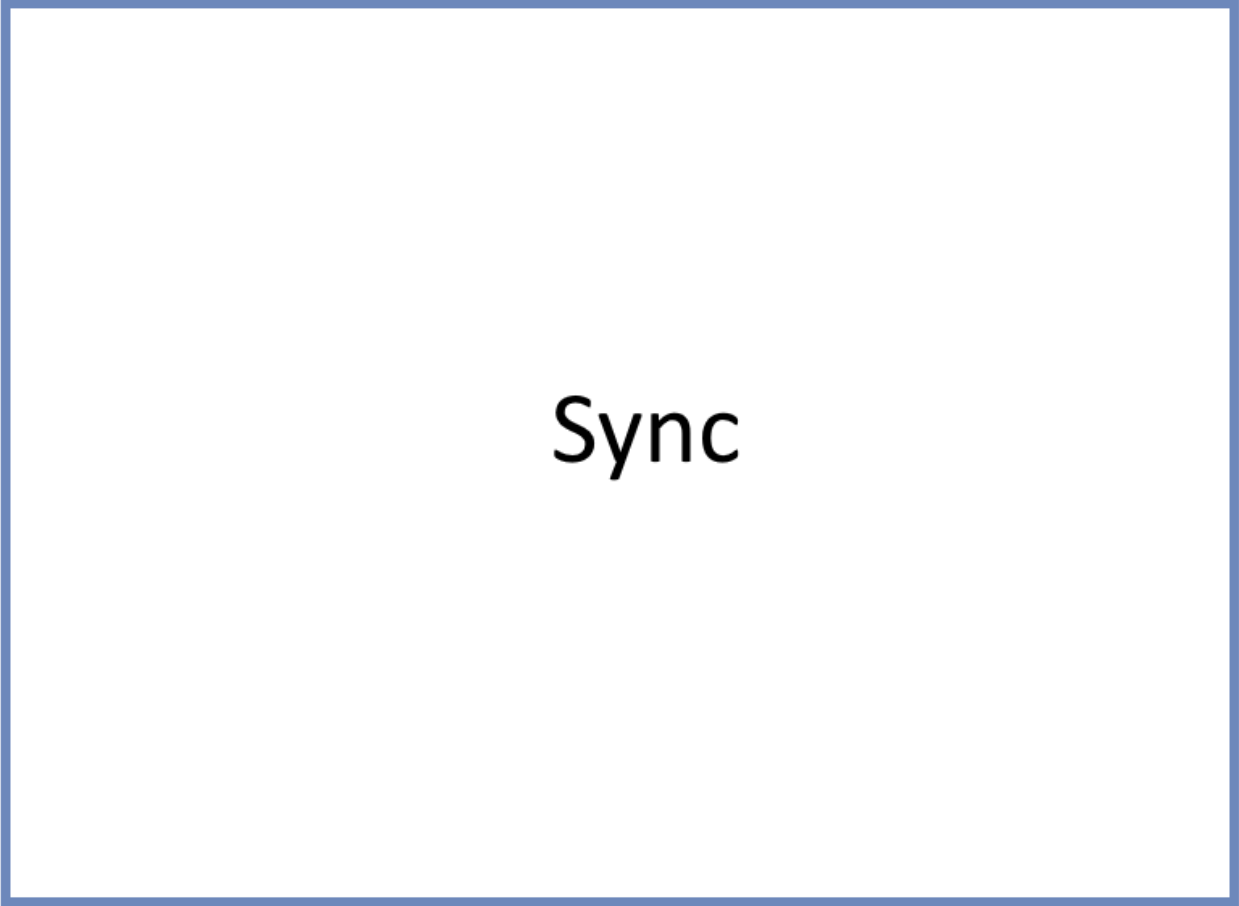### Actions

Result

Record is visible as Inwork

Sync									
ID	SN1	**Category**	Functional	**Security**	NA	**Execution**	Manual	**Reference**	
Description									

Testing the way the platform syncs to the DB and new updates.

All testing must be done as Site Admin.

Sync

WINCOM

Turn off Windchill+ only

ID	SN2	Category	Functional	Security	NA	Execution	Manual	Reference	

Description

To ensure valid testing, allow all installs

Actions

Set Windchill+ only to false

Result

The audit config is updated

Turn of all syncs

| ID | SN3 | Category | Functional | Security | NA | Execution | Manual | Reference | |

Description

As site admin turn off sync

Actions

Deploy test extension

ID	SN31	Category	Functional	Security	NA	Execution	Manual	Reference	

Description

Deploy an extension that will be present in the history

Actions

Download and deploy test extension

Click the link below to download the test extension

https://github.com/wincomplm/edk/raw/refs/heads/main/access/test-wexes/13.0/wex-example-helloworld-2.0-13.0.wex

Result

Installation is successfull

WINCOM

Undeploy the extension

ID	SN32	Category	Functional	Security	NA	Execution	Manual	Reference	

Description

Undeploy the extension deployed in previous step

Actions

Result

Enable an extension to be installed from the DB

| ID | SN4 | Category | Functional | Security | NA | Execution | Manual | Reference | |

Description

By setting the record to released the extension will be installed by sync

Actions

As site admin set a previously installed extension to Released
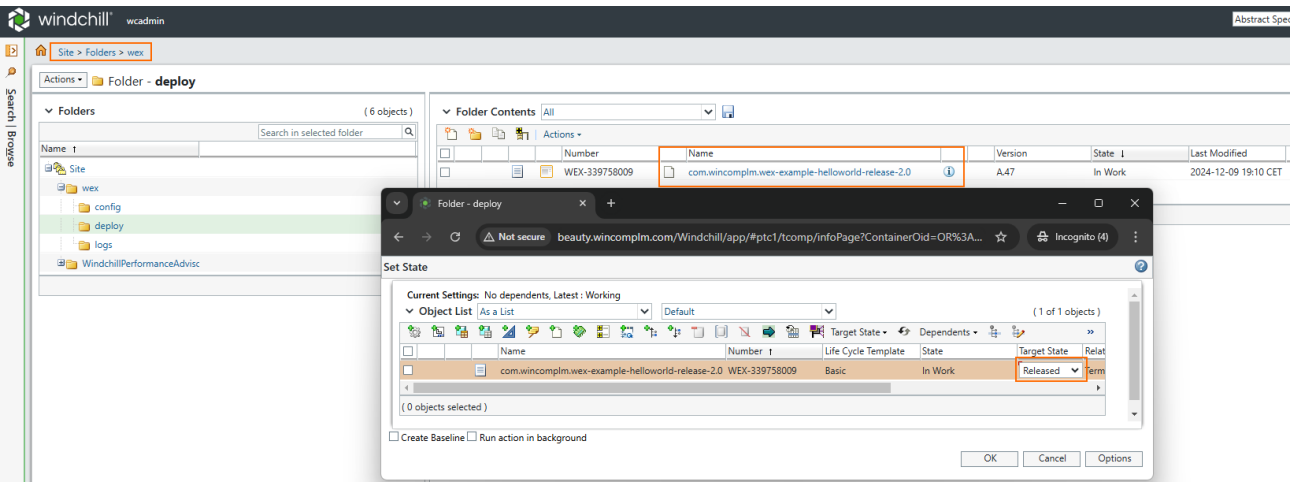
Result

The document is set to released

Check the system detects the record is valid									
ID	SN5	**Category**	Functional	**Security**	NA	**Execution**	Manual	**Reference**	

Description

The diags will show that this extension is ready to deploy.

This features allows this system to maintain the DB as as the single source of truth for clusters and containerized systems.

Actions

Result

WINCOM

Setup sync from the DB

ID	SN6	Category	Functional	Security	NA	Execution	Manual	Reference	

Description

Set the sync to read the DB and update the system if required

Actions

Set sync so that the DB sync is enabled but the resource is not

Result

After a few minutes the extension appears as installed. This may take up to 5 minutes.

WINCOM

Check the sync diags shows a valid update

| ID | SN7 | Category | Functional | Security | NA | Execution | Manual | Reference | |

Description

The systems will after some minutes detect the disparity and install the extension automatically.
The diags will now show the update was complete

Actions

Result

Turn of all syncs							
ID	SN8	**Category**	Functional	**Security**	NA	**Execution**	Manual	**Reference**	

Description
As site admin turn off sync so that the system does not synchronize with the DB or resource folder

Actions

Install the test wex-sync

ID	SN9	**Category**	Functional	**Security**	NA	**Execution**	Manual	**Reference**	

Description

The test included a 2.1 vesion of the Hello World extension which it will add to the resource area that is checked by sync.

Actions

Download and deploy test extension

Click the link below to download the test extension (you may need to copy the link)

https://github.com/wincomplm/edk/raw/refs/heads/main/access/test-wexes/13.0/wex-example-sync-2.0-13.0.wex
https://github.com/wincomplm/edk/raw/refs/heads/main/access/test-wexes/13.0/wex-example-sync-2.0-13.0.wex

Result

Extension deployed

Check the sync diags show valid update
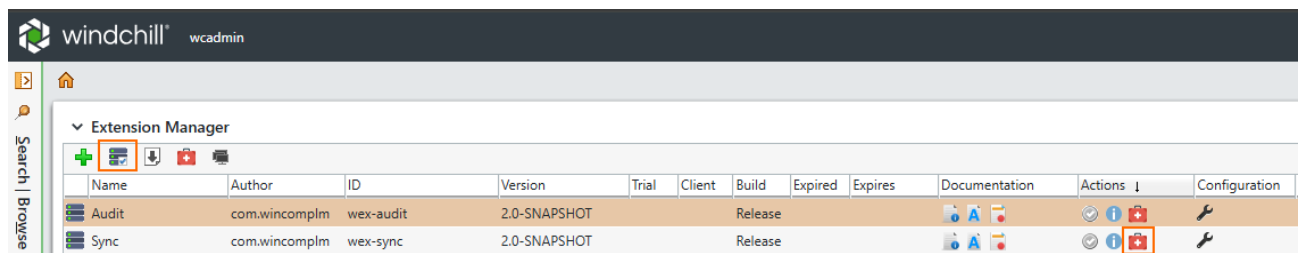
ID	SN10	Category	Functional	Security	NA	Execution	Manual	Reference	

Description

The diags will now show the sync is required.

Note that Hello World 2.0 must already be installed.

Actions

Result

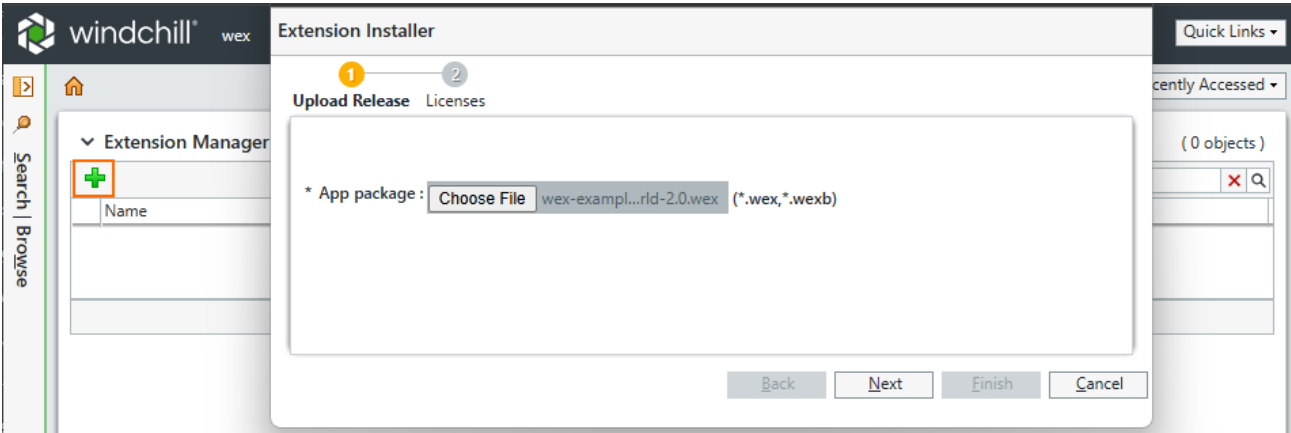## Check the sync diags show valid update

ID	SN10	Category	Functional	Security	NA	Execution	Manual	Reference	

Description

The diags will now show the sync is required.

Note that Hello World 2.0 must already be installed.

Actions

windchill wcadmin

Extension Manager

Name	Author	ID	Version	Trial	Client	Build	Expired	Expires	Documentation	Actions ↓	Configuration
Audit	com.wincomplm	wex-audit	2.0-SNAPSHOT			Release					
Sync	com.wincomplm	wex-sync	2.0-SNAPSHOT			Release					

Result

Sync Extensions

Database Sync

ID	Version	DB Version	Needs Sync	DB older	On DB	On Disk
com.wincomplm.wex-example-helloworld	2.0	2.0	false	false	true	true

Resource Sync

ID	Version	Resource Version	Needs Sync	On Disk
com.wincomplm.wex-example-helloworld	2.0	2.1	true	true

wcom

WINCOM

Confidential

32

Setup sync from the resources								
ID	SN11	**Category**	Functional	**Security**	NA	**Execution**	Manual	**Reference**	

Description

Set the sync to read from the resource area and update the system if required

Actions

Set sync so that the resource sync is enabled but the DB is not

Result

The sync config is updated

WINCOM

New resource extension deployed							
ID	SN12	**Category**	Functional	**Security**	NA	**Execution**	Manual	**Reference**	

Description
The 2.1 Hello World extension will be deployed

Actions
Wait + or - 5 minutes for sync to trigger the automatic deployment of the extension

Result

Configuration									
ID	C1	**Category**	Functional	**Security**	NA	**Execution**	Manual	**Reference**	

Description

Testing the way the platform manages configurations

Install the configuration example									
ID	C2	**Category**	Functional	**Security**	NA	**Execution**	Manual	**Reference**	

Description

The configuration options include ones that are available to the extension admin

Actions

Download and install the configuration example extension

https://github.com/wincomplm/edk/raw/refs/heads/main/access/test-wexes/13.0/wex-example-config-2.0-13.0.wex

Result

Check the security report of the example shows the correct information

ID	C3	Category	Functional	Security	NA	Execution	Manual	Reference	

Description

The security reports will show which options are made visible to the Extension Admins

Actions

No action, this is for information only

Result

Configuration

The configuration options for both Site Admin and Extension Business Configuration

Business Manager Options

Category	Name	Type	Description	Required
Business Admin	businessString	String	An option visible to the business admins	false

Admin Options

Category	Name	Type	Description	Required
Basic	exampleString	String	Simple string	false
Basic	exampleBoolean	boolean	Boolean	false
Collections	exampleList	List	String list	false
Collections	exampleMap	Map	String map	false
Collections	exampleStateList	List	String list with handler	false
Security	examplePassword	String	Password	false

WINCOM

Check site admin has full access to the configuration

ID	C4	Category	Functional	Security	NA	Execution	Manual	Reference	

Description

All configurations items are visible

Actions

Result

WINCOM

Check extension admin has limited access to the configuration									
ID	C5	**Category**	Functional	**Security**	NA	**Execution**	Manual	**Reference**	
Description									
Only items annotations as business are visible									
Actions									

Result	

Menus									
ID	M1	**Category**	Functional	**Security**	NA	**Execution**	Manual	**Reference**	

Description

Testing the extension menu options

Menus

Check extension manager user can do an install of a signed extension

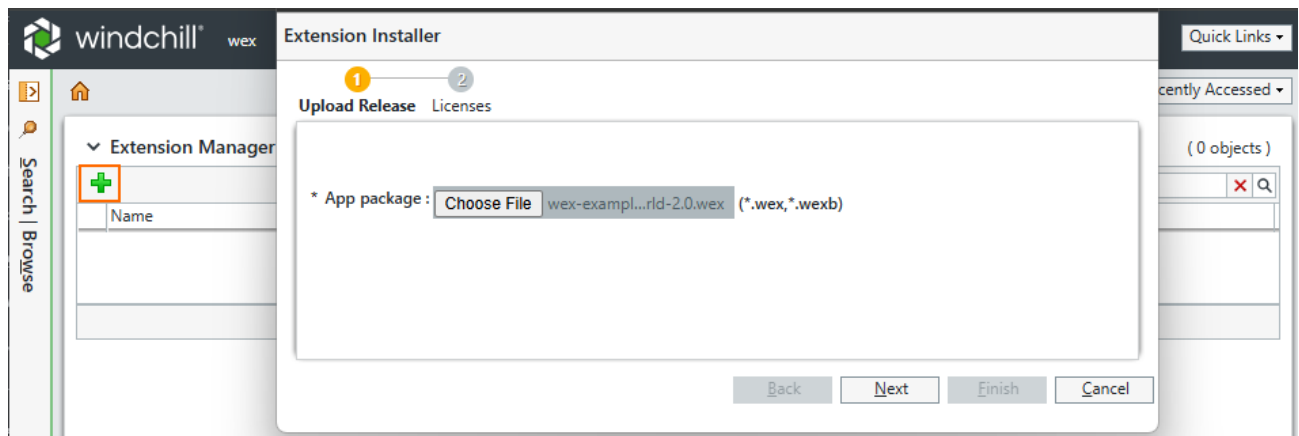| ID	M2	Category	Functional	Security	NA	Execution	Manual	Reference	

Description

This extension will add a menu in the Quick Links

Actions

Download and deploy test extension

Click the link below to download the test extension

https://github.com/wincomplm/edk/raw/refs/heads/main/access/test-wexes/13.0/wex-example-helloworld-2.0-13.0.wex

Result

Check the menus are visible
Will require a browser refresh