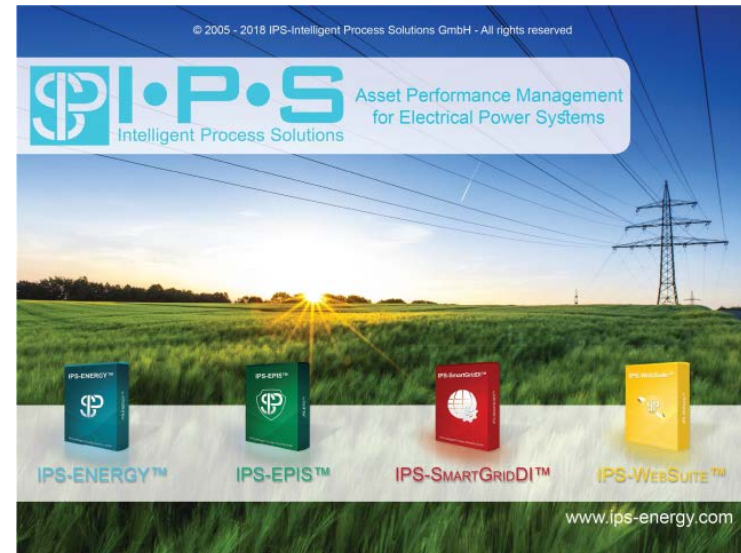


# Routine Maintenance

For Protection Devices in IPS

# Contents

- > Login access
- > Instructions in IPS Comparison
- > Export to Excel
- > Noti attachments
- > Other types IPS logins
- > Help Reference

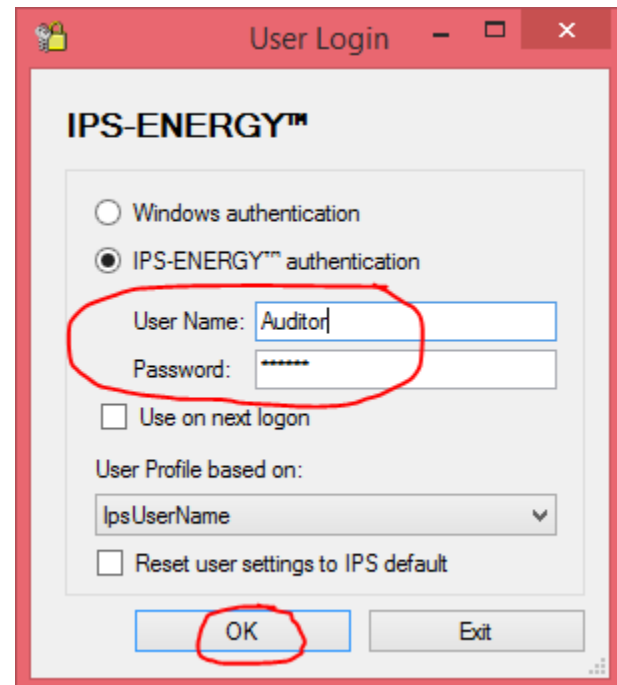


# Login as Auditor

- > Open IPS-Production via Citrix.
- > Use the following access

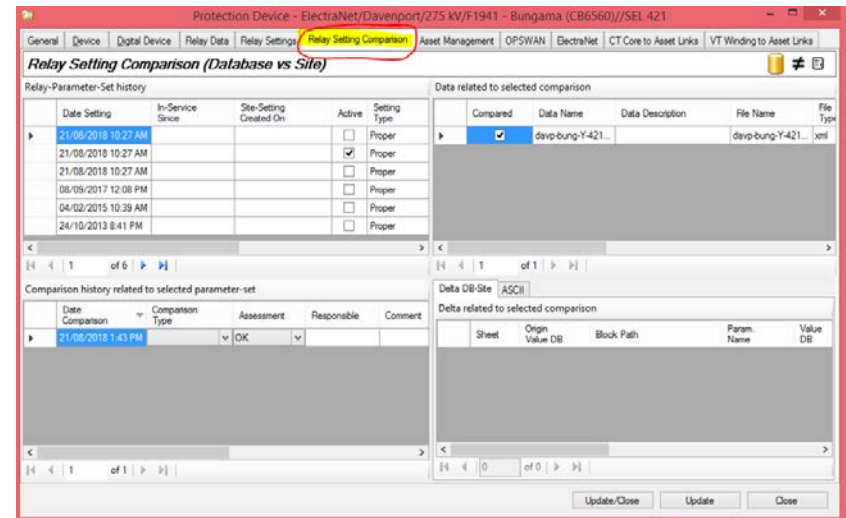
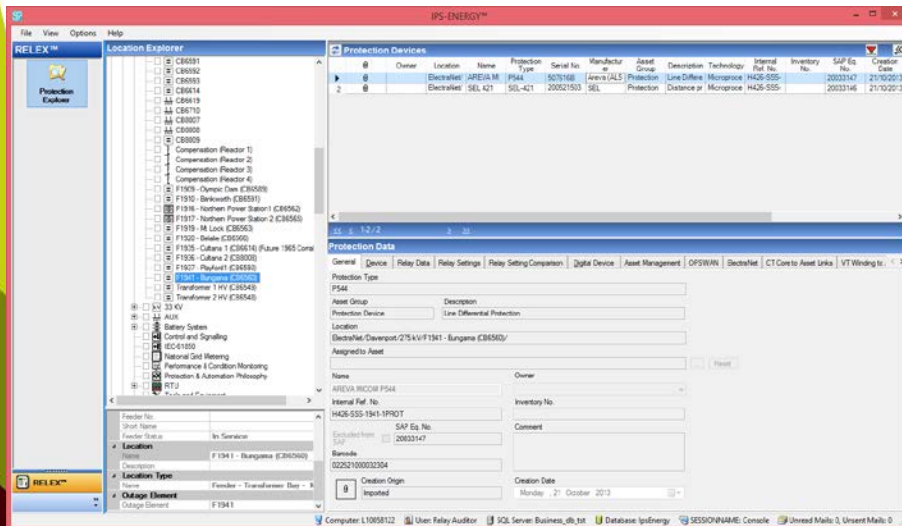
User Name: Auditor

Password: xxxxxxxx

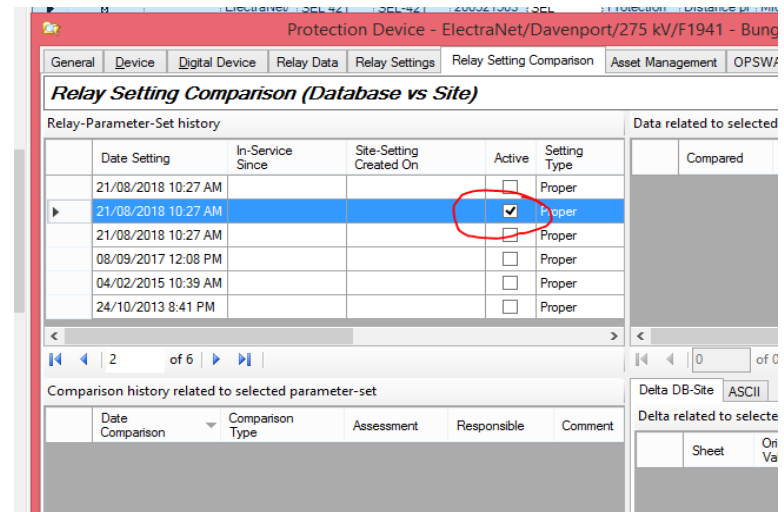


# Steps in IPS Comparison

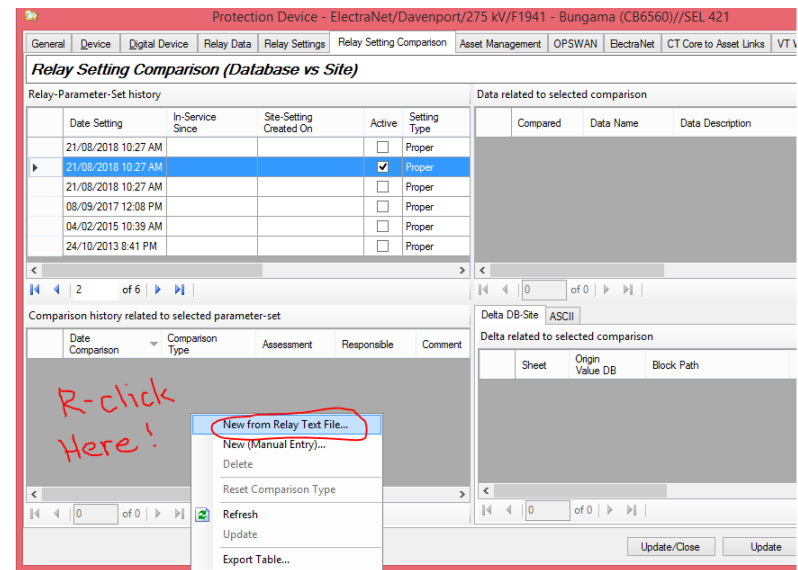
- 1.1 Select the location.
- 1.2 Select the protection device.
- 1.3 Double click device to enter edit mode.
- 1.4 In edit mode, select “Relay Setting Comparison Tab”



2.1 Under “Relay-Parameter-Set history” window select the “Active” Setting.

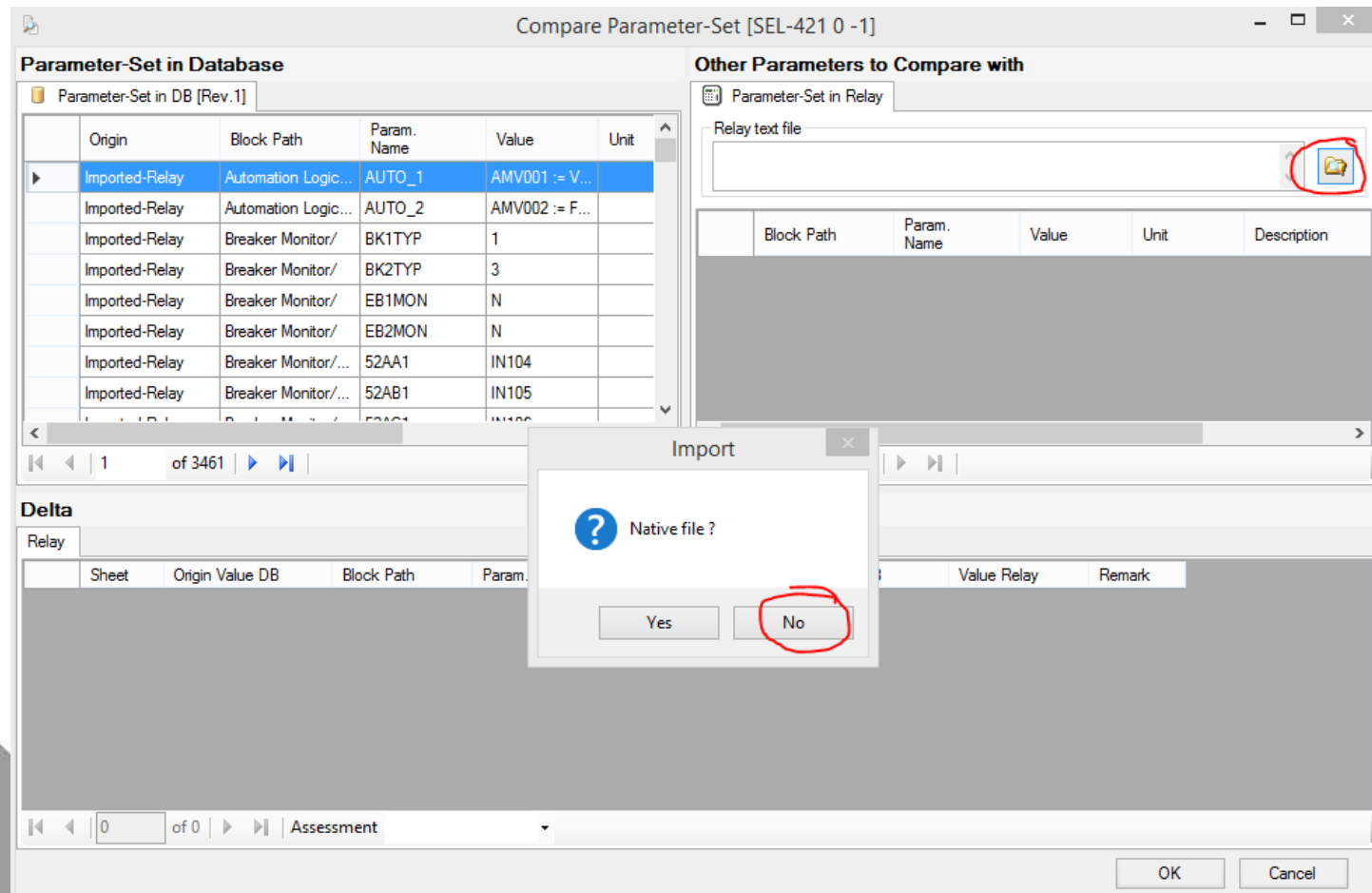


2.2 Right Click inside “Comparison history related to selected parameter-set” window and select “New from Relay Text File...”



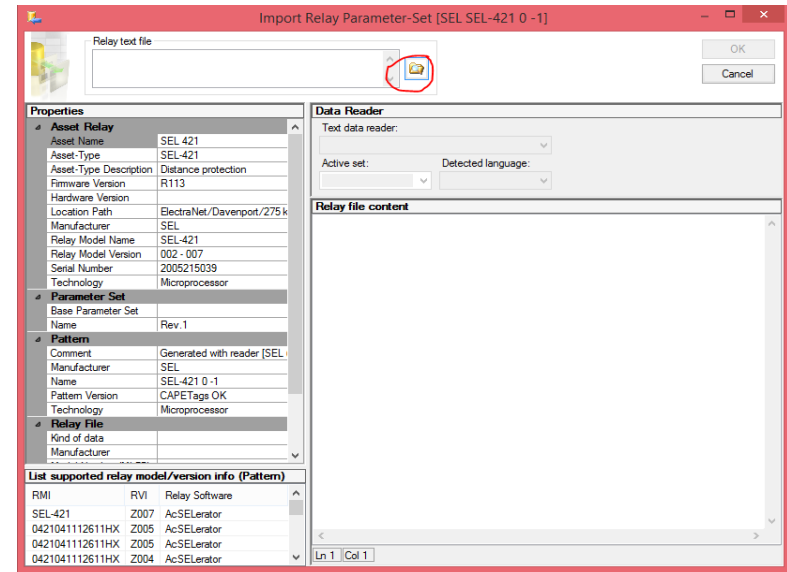
3.1 A new window pops up.

3.2 Select “File explorer” icon and click “**NO**” in the Import Native File notification window.



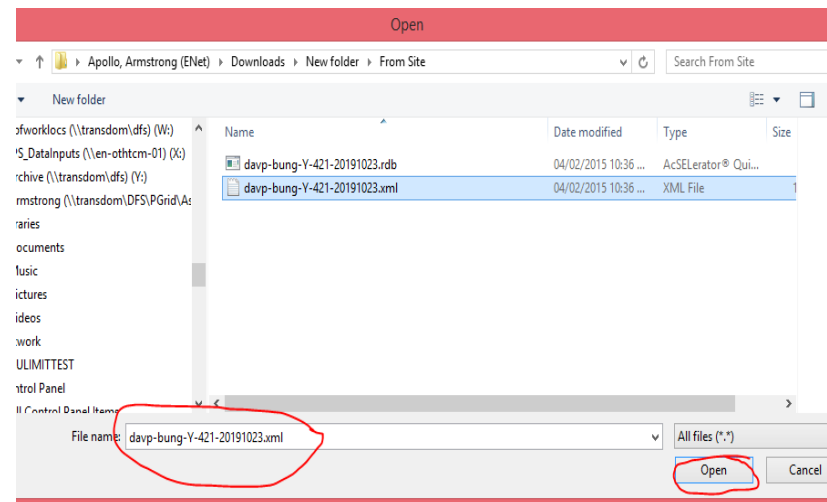
4.1 Another window pops up.

4.2 On it, select again the File Explorer icon.



4.3 Please select the “**exported**” file, i.e. (.xml, .txt, .urs, .csv, .rtf, etc.) from the file explorer window.

> *Note: As found config file must be exported first to a file format that IPS pattern can read and recognise.*

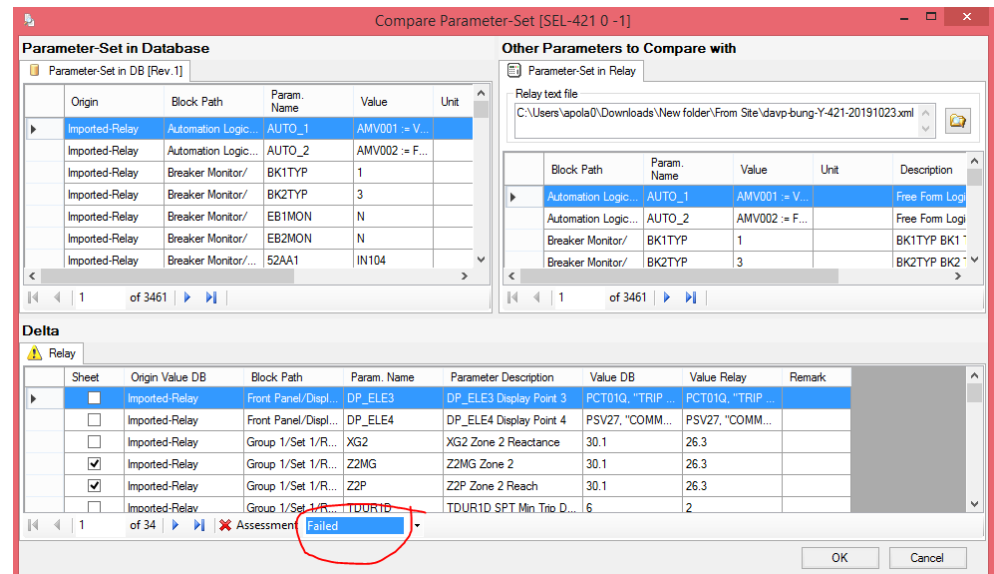
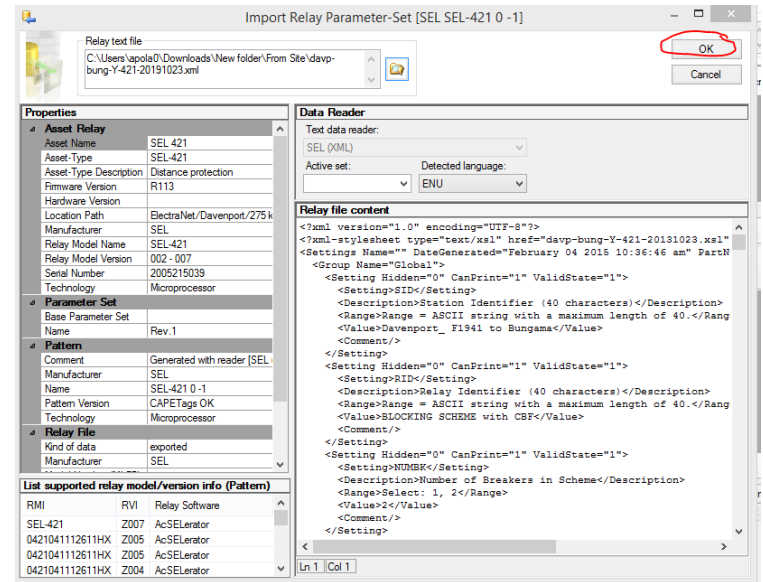


5.1 Click OK.

5.2 3<sup>rd</sup> window will disappear.

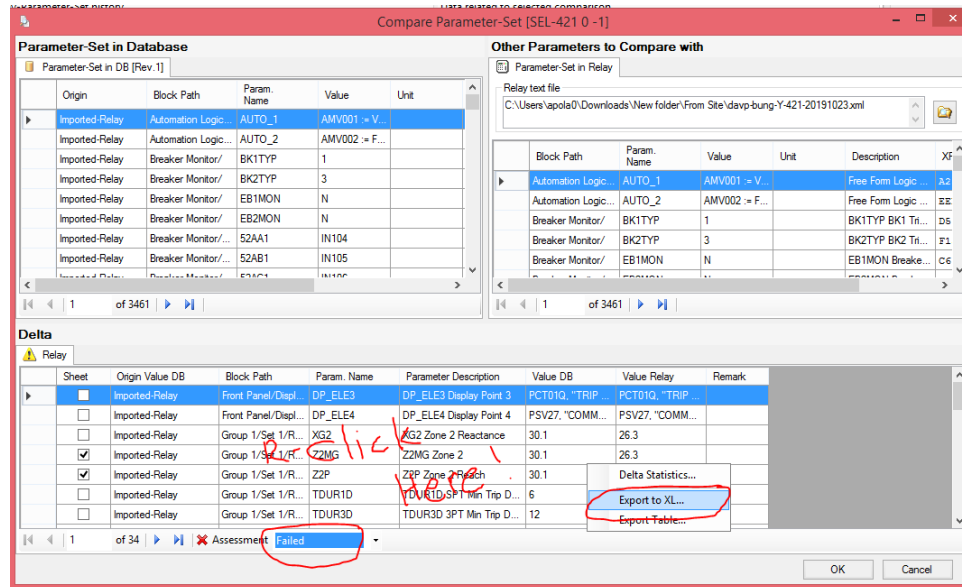
5.3 Setting comparison will commence.

5.4 When done. Assessment below the “Delta” window will show “Failed” or “OK”

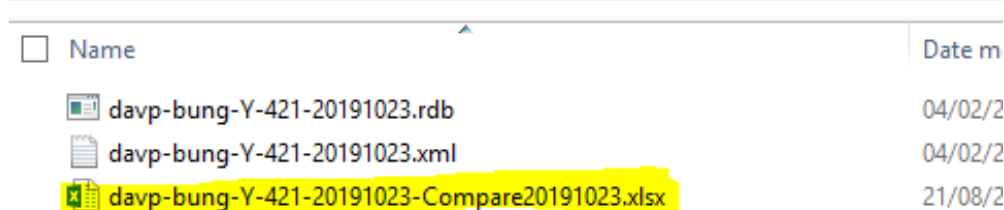




6.1 If assessment fails, right click inside Delta window and select “Export to XL..”



6.2 Rename excel comparison file for easy identification.



## REMARKS:

Before concluding that there are changes, open the comparison excel file and review the compared values. There are instances that “blank spaces” at the end of “Param. Names” were added during the export process. IPS recognises these spaces as different fields. These are not valid issues!

C	D	E	F	G	H
Block Path	Param. Name	Parameter Description	Value DB	Value	Remark
y Bay Control/	MIMIC	Busbar One-line Screen Number	9		Not found in other Parameter-Set
y Bay Control/	MIMICDATABASE	Connected Bay Control Database	SEL		Not found in other Parameter-Set
y Global/Synchronized Phasor Measurement/	PHVOLT	Include Voltage Terminal	"combo of Y		Not found in other Parameter-Set
y Group 1/Set 1/Relay Configuration/	E32	Directional Control	AUTO		Not found in other Parameter-Set
y Group 1/Set 1/Relay Configuration/Directional Control Element/	ORDER	Ground Dir. Element Priority (combine Q,V,I)	QV		Not found in other Parameter-Set
y Group 2/Set 2/Relay Configuration/	E32	Directional Control	AUTO		Not found in other Parameter-Set
y Group 2/Set 2/Relay Configuration/Directional Control Element/	ORDER	Ground Dir. Element Priority (combine Q,V,I)	QV		Not found in other Parameter-Set
y Group 3/Set 3/Relay Configuration/	E32	Directional Control	AUTO		Not found in other Parameter-Set
y Group 3/Set 3/Relay Configuration/Directional Control Element/	ORDER	Ground Dir. Element Priority (combine Q,V,I)	QV		Not found in other Parameter-Set
y Group 4/Set 4/Relay Configuration/	E32	Directional Control	AUTO		Not found in other Parameter-Set
y Group 4/Set 4/Relay Configuration/Directional Control Element/	ORDER	Ground Dir. Element Priority (combine Q,V,I)	QV		Not found in other Parameter-Set
y Group 5/Set 5/Relay Configuration/	E32	Directional Control	AUTO		Not found in other Parameter-Set
y Group 5/Set 5/Relay Configuration/Directional Control Element/	ORDER	Ground Dir. Element Priority (combine Q,V,I)	QV		Not found in other Parameter-Set
y Group 6/Set 6/Relay Configuration/	E32	Directional Control	AUTO		Not found in other Parameter-Set
y Group 6/Set 6/Relay Configuration/Directional Control Element/	ORDER	Ground Dir. Element Priority (combine Q,V,I)	QV		Not found in other Parameter-Set
y Port 5/SEL Protocol/	AUTO	Send Auto Messages to Port	Yes		Not found in other Parameter-Set
y Port 5/SEL Protocol/	FASTOP	Enable Fast Operate Messages	No		Not found in other Parameter-Set
Bay Control/	MIMIC	Busbar One-line Screen Number		9	Not found in database
Bay Control/	MIMICDATABASE	Connected Bay Control Database		SEL	Not found in database
Global/Synchronized Phasor Measurement/	PHVOLT	Include Voltage Terminal		Y	Not found in database
Group 1/Set 1/Relay Configuration/	E32	Directional Control		AUTO	Not found in database
Group 1/Set 1/Relay Configuration/Directional Control Element/	ORDER	Ground Dir. Element Priority (combine Q,V,I)		QV	Not found in database
Group 2/Set 2/Relay Configuration/	E32	Directional Control		AUTO	Not found in database
Group 2/Set 2/Relay Configuration/Directional Control Element/	ORDER	Ground Dir. Element Priority (combine Q,V,I)		QV	Not found in database
Group 3/Set 3/Relay Configuration/	E32	Directional Control		AUTO	Not found in database
Group 3/Set 3/Relay Configuration/Directional Control Element/	ORDER	Ground Dir. Element Priority (combine Q,V,I)		QV	Not found in database
Group 4/Set 4/Relay Configuration/	E32	Directional Control		AUTO	Not found in database
Group 4/Set 4/Relay Configuration/Directional Control Element/	ORDER	Ground Dir. Element Priority (combine Q,V,I)		QV	Not found in database
Group 5/Set 5/Relay Configuration/	E32	Directional Control		AUTO	Not found in database
Group 5/Set 5/Relay Configuration/Directional Control Element/	ORDER	Ground Dir. Element Priority (combine Q,V,I)		QV	Not found in database
Group 6/Set 6/Relay Configuration/	E32	Directional Control		AUTO	Not found in database
Group 6/Set 6/Relay Configuration/Directional Control Element/	ORDER	Ground Dir. Element Priority (combine Q,V,I)		QV	Not found in database
Port 5/SEL Protocol/	AUTO	Send Auto Messages to Port		Y	Not found in database
Port 5/SEL Protocol/	FASTOP	Enable Fast Operate Messages		N	Not found in database

6.1 When confirmed that no valid changes were found, assessment shall be revised to “OK”

The screenshot displays the 'Compare Parameter-Set [SEL-451-5 012 - 017]' window. It is divided into three main sections:

- Parameter-Set in Database:** A table listing parameters from the database, including columns for Origin, Block Path, Param. Name, Value, Unit, and Description.
- Other Parameters to Compare with:** A table listing parameters from a relay test file, with the same columns as the database table.
- Delta:** A comparison table with columns: Sheet, Origin Value DB, Block Path, Param. Name, Parameter Description, Value DB, Value Relay, and Remark. All entries in this table have 'Not found in relay' or 'Not found in database' in the Remark column, indicating a perfect match.

Handwritten blue annotations include:

- The text "ALL MATCH!" written across the bottom of the Delta table.
- Circles around the "Value DB" and "Value Relay" columns in the Delta table.
- A blue arrow pointing from the "Value Relay" column to the "Value DB" column.
- A circle around the "Assessment" dropdown menu at the bottom, which is currently set to "OK".

6.2 If changes are valid, just close window using “OK” button.

## 7.1 Complete the Comparison history window:

Comparison Type: *As found*

Comment: *“Routine Maintenance yyyyymmdd”*

Protection Device - ElectraNet/Davenport/275 kV/F1941 - Bungama (CB6560)//SEL 421

General | Device | Digital Device | Relay Data | Relay Settings | Relay Setting Comparison | Asset Management | OPSWAN | ElectraNet | CT Core to Asset Links | VT Winding to Asset Links

### Relay Setting Comparison (Database vs Site)

Relay-Parameter-Set history

Date Setting	In-Service Since	Site-Setting Created On	Active	Setting Type	Setting Status	Set Name
21/08/2018 10:27 AM			<input type="checkbox"/>	Proper	In service	Rev.0
21/08/2018 10:27 AM			<input checked="" type="checkbox"/>	Proper	In service	Rev.1
21/08/2018 10:27 AM			<input type="checkbox"/>	Proper	In service	Rev.2
08/09/2017 12:08 PM			<input type="checkbox"/>	Proper	Archived	Parameter Set
04/02/2015 10:39 AM			<input type="checkbox"/>	Proper	Archived	Parameter Set
24/10/2013 8:41 PM			<input type="checkbox"/>	Proper	Archived	Excel Import

Data related to selected comparison

Compared	Data Name	Data Description	File Name	File Typ
<input checked="" type="checkbox"/>	davp-bung-Y-421...		davp-bung-Y-421...	xml

Comparison history related to selected parameter-set

Date Comparison	Comparison Type	Assessment	Responsible	Comment	Login Name
22/08/2018 2:20 PM	As found	Failed		Routine Maintenance 20191023	

Delta related to selected comparison

Sheet	Origin Value DB	Block Path	Param. Name	Value
<input type="checkbox"/>	Imported-Relay	Front Panel/Display Points an...	DP_ELE3	PCTI
<input type="checkbox"/>	Imported-Relay	Front Panel/Display Points an...	DP_ELE4	PSV2
<input type="checkbox"/>	Imported-Relay	Group 1/Set 1/Relay Configur...	XG2	30.1
<input checked="" type="checkbox"/>	Imported-Relay	Group 1/Set 1/Relay Configur...	Z2MG	30.1
<input checked="" type="checkbox"/>	Imported-Relay	Group 1/Set 1/Relay Configur...	Z2P	30.1

Update/Close | Update | Close

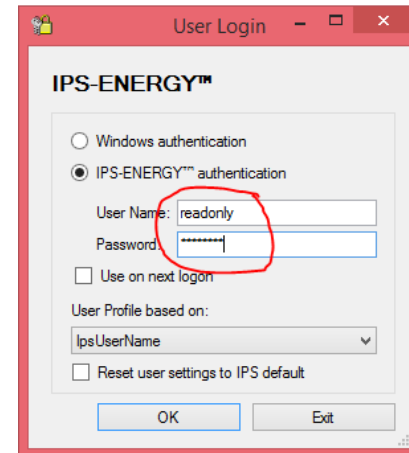
## 7.2 Click Update/Close

# Noti Attachments:

- > For immediate references, the following files should be attached in the Notification when valid changes were found:
  - 1 – **Original Config** file (as extracted from site)
  - 2 – **Exported config** file (as converted from the original config file)
  - 3 – **Compare Excel** file (as extracted from IPS)
  - 4 – Comparison results using manufacturer's software (As required for further confirmation)

# For Other Types of IPS Logins

> Read only Access – for browsing all assets in IPS including extracting files.



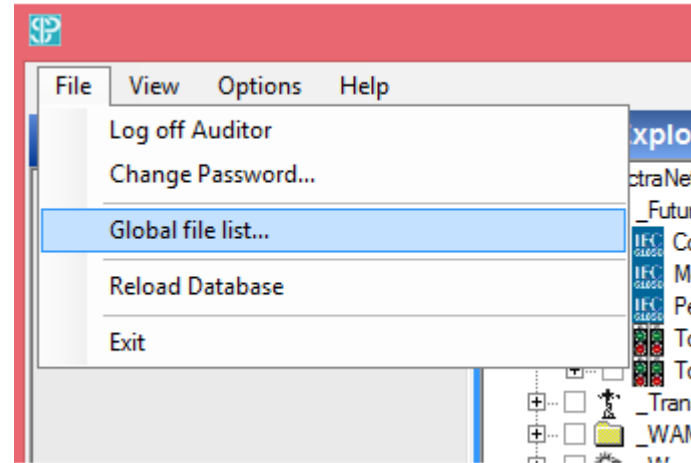
> Windows Authentication – for working with protection devices with RSRs (Relay Setting Request)

> Hands on training required

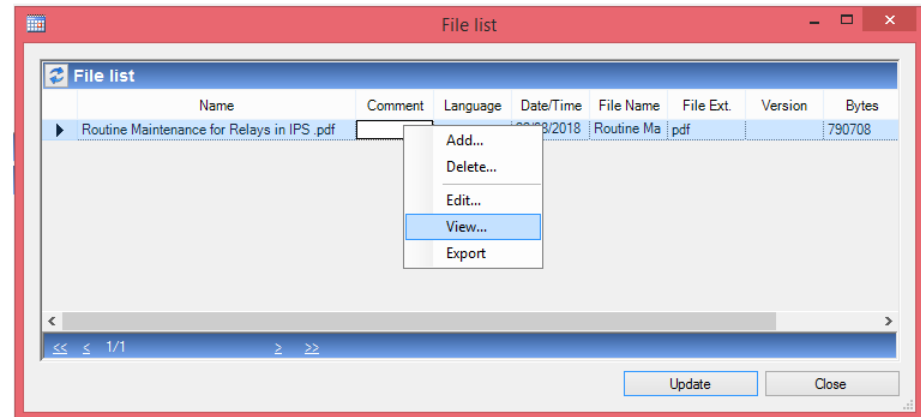


# Help Reference

> File >>> Global file list...



> Right Click then View or Export.





# Questions?

*Please call or email the undersigned IPS Administrator.*



# Thank you

Presenter's name: Armstrong Apollo

Phone: 08 84047516

Mobile: 0405538148

Email: [Apollo.Armstrong@electranet.com.au](mailto:Apollo.Armstrong@electranet.com.au)