DISTRIBUTION SOLUTIONS SERVICE

ABB Ability™ Backup Management for electrical systems - Data Care 'Engineer' Guidelines



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1 Introduction

1.1 This manual

The manual contains an overview of the access levels and user rights for 'Engineer' role in ABB Ability™ Backup Management for electrical systems - Data Care. The manual describes how the 'Engineer' can use individual features and functionalities in Data Care.

1.2 Intended audience

This manual addresses the users using Data Care in accessing or uploading relay information.

Basic process that can be handled by 'Engineer' in each sections of Data Care is explained here in detail with examples and screen images, wherever necessary.

1.3 Document revision history

Document revision/date	History
A /April 2021	First release



Download the latest documents from the ABB Web site https://new.abb.com/medium-voltage

1.4 Symbols and conventions

1.4.1 Symbols



The caution icon indicates important information or warning related to the concept discussed in the text.



The information icon alerts the reader of important facts and conditions.



The tip icon indicates advice on, for example, how to use a certain function.

1.4.2 Document conventions

A particular convention is used in this manual.

- User role are indicated with quotation mark. 'Engineer'.
- The navigation menu titles are indicated with bold.
 - User management.
- Submenu selection wherein more information is to be fulfilled is indicated in italic and bold.
 - In **User management**, click *Add user*.
- Navigation menu and Submenu selection options are indicated in italic.
 - In **User management**, click **Add user** and select *Type*.
- Parameter selection is shown in courier.
 - In **User management**, click *Add user* and select *Type* as *Subcontractor*

2 ABB Ability™ Backup Management for electrical systems – Data Care

2.1 Description

ABB Ability™ Backup Management for electrical systems - Data Care is an advanced data sharing and back-up service that secures technical documentation of protection and control relays throughout their entire life cycle. Data Care is a Web-based service which provides the customer with a structured storing space for technical documentation, such as relay configuration files, disturbance recordings, technical solutions, drawings and other documents. Special features such as access to documents for multiple users, service- related alarm email notifications and news updates from ABB make Data Care a unique choice for utility and industry customers.

Data Care is set up and administered by "Account Administrator" user authorized by the customers. At the beginning, "Account Administrator" prepares the structure up to the substation level and grants access to ABB local contact person, own employees and subcontractors such as third party service providers. Authorized users can then freely add bays/ relays and upload/download configuration files, technical documents into different nodes in the **Graphical structure**.

Both the uploading and downloading of files and the user management interface are available through this portal. Storage servers are secured against attacks and backed up to prevent data loss during server maintenance. This makes Data Care a safe storing place for all technical documentation.

2.2 User access levels – summary of features based on individual user rights

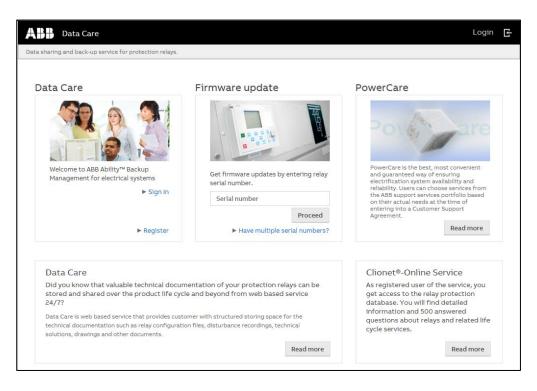
In Data Care, user accounts are created and user rights defined and granted by 'Account Administrator'. With the right employees and subcontractors having access, the relay data can be promptly stored and conveniently shared anytime. Traveling to sites and substations to get up-to-date relay data can therefore often be avoided. This makes day-to-day operation of the relay smooth and cost-efficient.

The user rights are defined according to the assigned roles. The navigation pane differs for individual user rights as follows:

'Account Administrator'	'Engineer'	'ABB Analyst'
Main page	Main page	Main page
Company information	Company information	Company information
Account license	-	Account license
information		information
Graphical structure	Graphical structure	Graphical structure
License subscriptions	-	License subscriptions
User management	-	User management
Company management	-	Company
		management
Substation management	Substation	Substation
	management	management
My relays	My relays	My relays
Upload file	Upload file	Upload file
Service request	Service request	-
Activity report	-	-
Recycle bin	Recycle bin	-

2.3 Data Care portal

Data Care portal can be accessed via https://protection.datacare.abb.com



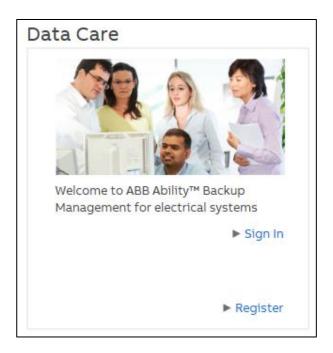
To access Data Care, license subscription needs to be purchased through ABB Ability™ Marketplace or Power Care customer support agreement. **License subscriptions** are based on number of users, number of devices and the storage capacity.

3 Data Care functionality

3.1 Data Care Sign In

Registered user can **Sign In** only with Single Sign On (SSO) credentials as received from ABB. The request for SSO can be made through **Register** process.

User can manage SSO account, for example, change of password etc. through the link embedded in mail that user receives from ABB after granting SSO rights. Users receives this information to the registered email address that they provided during registration process.



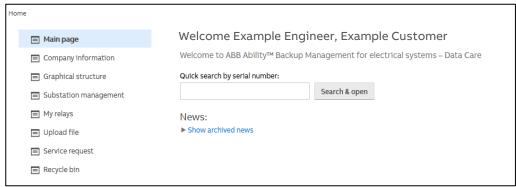


To **Sign In** to the Data Care, user need user rights in Data Care as well as SSO credentials.

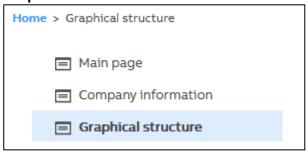
- SSO credentials can be made through register process as shown above.
- Data care access rights need to be requested from the "Account Administrator"

3.2 Navigation

After successful **Sign In** user can see following screen and access individual features.



The navigation path is defined on the top of the page. For example, if user is accessing **Graphical structure** then the path shown is **Home > Graphical structure**.

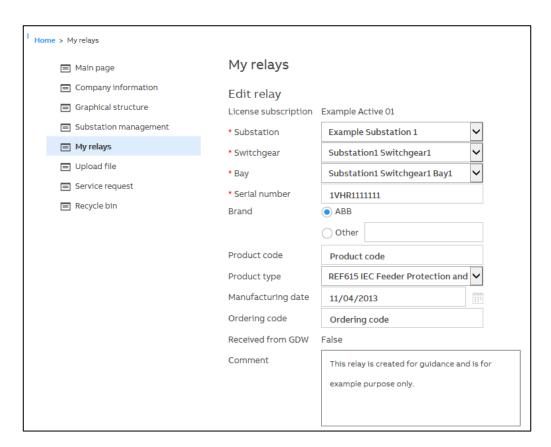


3.3 Main Page

User can quickly **Search & open** information of particular relay by entering serial number of the relay in **Quick search by serial number** field.



My relays > Edit relay page appears wherein the page provides desired relay information.





The same screen can also be viewed through **My relays** section and then by selecting *View/Edit* of desired relay.

User can refer to the list of 10 latest *news* (recent and archived) as published by 'ABB Administrator'.



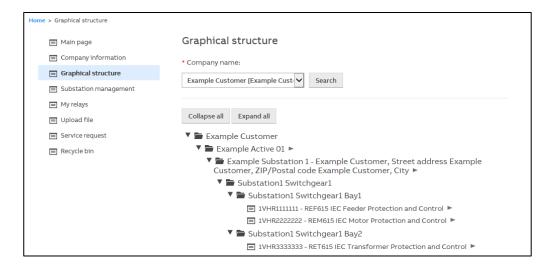
3.4 Company information

The **Company information** page displays the information about the company where the user is assigned to



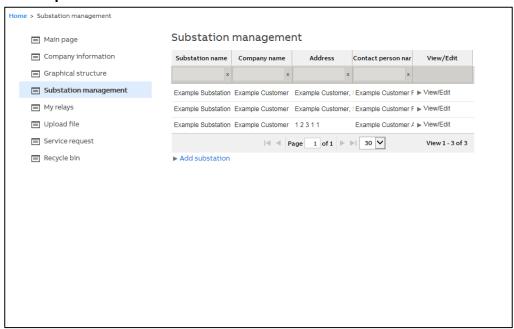
3.5 Graphical structure

User can view substations, bays and relays in a **Graphical structure** and can quickly view its details by selecting arrow in front of the respective nodes.



3.6 Substation management

User can *Search* information of substations linked to **License** subscriptions.



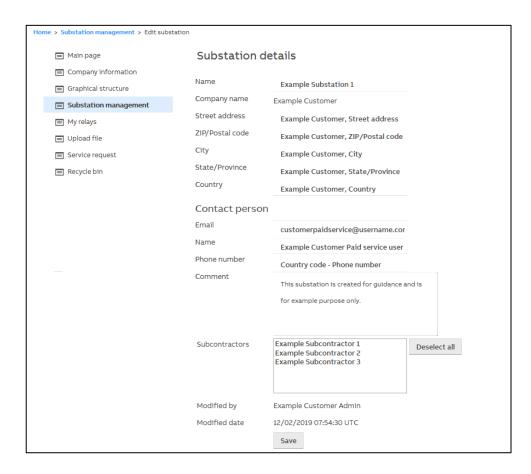
Description of this search criteria options is as follows:

Substation	The name of the substation
name	
Company name	The owner/ operator of the substation (Normally it
	is the User company).
Address	Address of the User company
Contact Person	The contact person of the company representative

3.6.1 View/Edit Substation

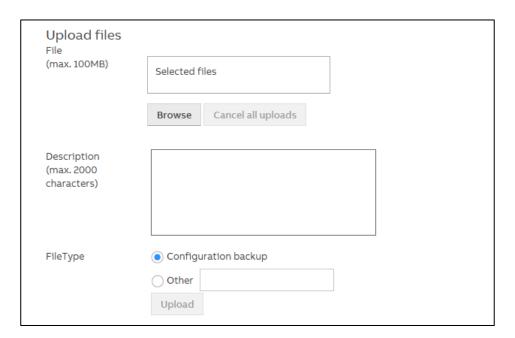
User can manage substation details by selecting View/Edit:

- Assign/unassign subcontractors.
- Upload/download configuration or any other files to/from substation
- Add/Delete switchgear/bay/relay to/from substation through Manage substation
- Add/Delete alarm notification to/from substation
- Download all files that belongs to substation



'User can Assign or Unassign *Subcontractors* to desired substation. Only authorized users who work for the subcontractors which are added into substation can view/work for substation.

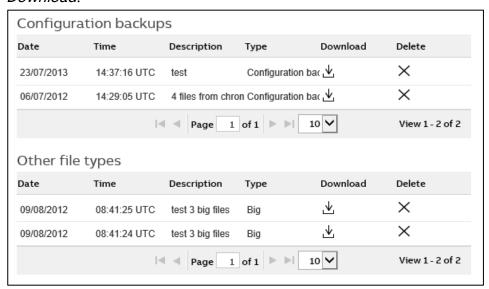
3.6.1.1 To upload files to Substation:



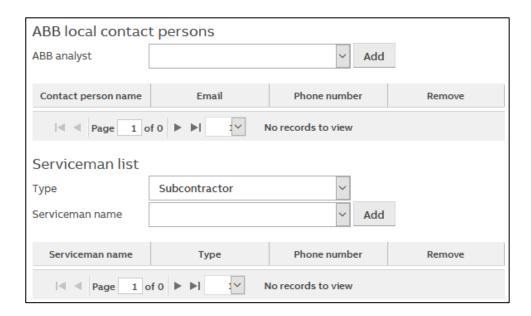
User can upload files to substation as follows:

- Select files with *Browse*
 - The application supports upload of multiple files and shows the progress bar.
- Maximum 2000 characters can be entered into *Description* text field.
- Select *File type.* Write the information if *File Type* is selected Other
- Files will be uploaded to server when *Upload* is selected
- Uploaded files will be saved in Data Care database with UTC timestamp.

List of uploaded files is shown under *Configuration backups* and *Other file types*. Uploaded file can be deleted / downloaded by *Delete* or *Download*.



3.6.1.2 View ABB local contact persons and Engineers assigned to substation

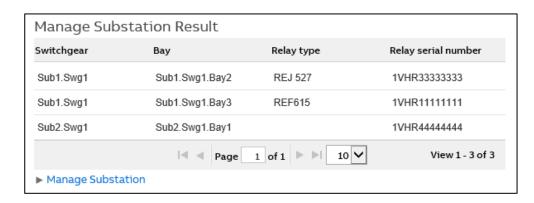


Feature allows user to view 'ABB Analyst' and 'Engineer' assigned to substation.

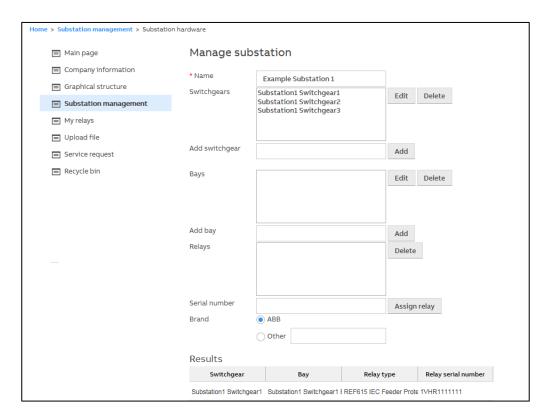
3.6.1.3 Manage Substation Result

User can select *Manage Substation* which is visible below *Manage substation Result* table. It allows to,

- add or delete switchgears
- add or delete bays
- add or delete relays
- change the structure of substation as per site requirement



Following page will appear when *Manage Substation* is selected:





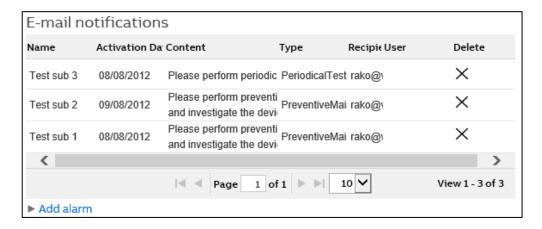
Only relay added in Data Care can be added to the substation. If relay does not exists in Data Care then it can be added with **My relays**.



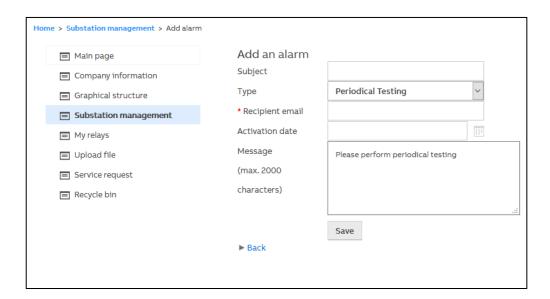
Relays belongs to particular bay and/or switchgear has to be deleted first before deleting that particular bay or switchgear.

3.6.1.4 Email notifications

List of email notifications is created under this section



Email notification can be created by selecting *Add alarm* option which is available below *Email notifications* table. Following information can be specified:

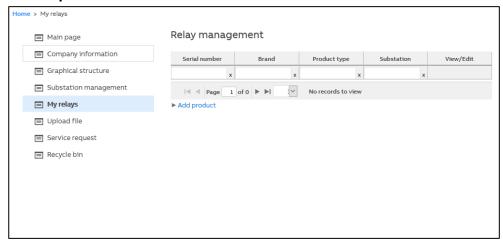




Message is preselected for Alarm *Type* Periodical testing and Preventive Maintenance. Free text can be entered by selecting the Alarm *Type as* Other.

3.7 My relays

User can *Search* information of substations linked to **License** subscriptions.

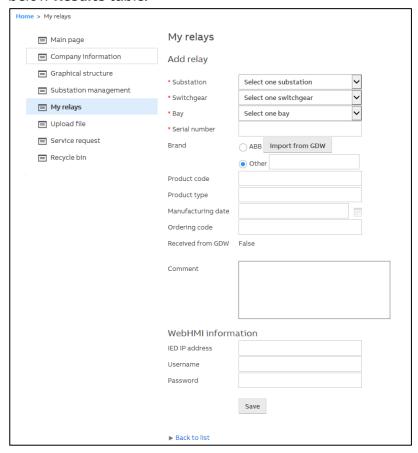


Description of this search criteria options is as follow:

Serial number	The serial number of the relay
Brand	The brand name of the relay manufacturer
Product Type	The mode / typel of the relay
Substation	The substation where the relay is installed

3.7.1 Add Product

User can add new relay by selecting *Add product* which is available below *Results* table.



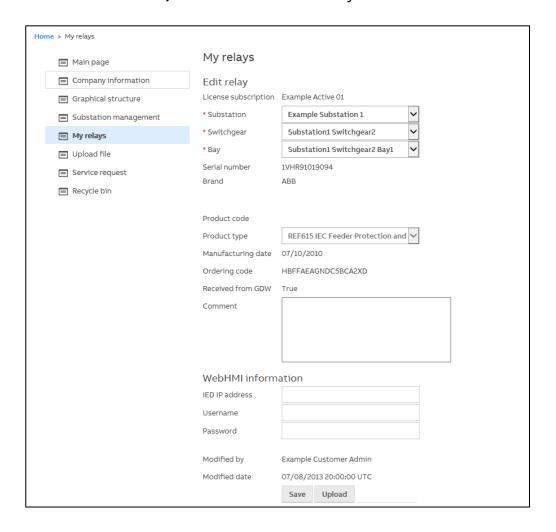
Description of the required information is as follows:

Substation	List of substations specified under License
	subscription is available in drop-down menu. User
	can select the required substation from this available
	list.
Switchgear	List of registered switchgears within substations is
	available in drop-down menu. User can select the
	required switchgear from this available list.
Bay	List of registered bays within switchgears of
	substations is available in drop-down menu. User can
	select the required bay from this available list.
Serial number	Insert serial number of the product (relay)
Brand	Select manufacturer of the product (relay)
	If brand is ABB, user can click import from GDW
	(Global Data Warehouse). This will update the
	Product Code, Product Type, Manufacturing Date
	and Ordering Code.
Product code	Insert code of the product (relay), if any

Product type	If brand is ABB, user can select <i>Product type</i> from the
	list of ABB product types.
	If brand is Other, <i>Product type</i> can be entered as free text field and data will be saved in Data Care database.
	If <i>Product type</i> is not available with selected brand ABB then the same can be informed to 'ABB Analyst'.
Manufacturing	Insert manufacturing date of the product as
date	mentioned on the product (relay) label
Ordering Code	Insert ordering code of the relay.
Received from	Indicates if relay is transferred from Global Data
GDW	Warehouse - GDW (True) or if it is manually added by
	users (False)
Comment	Write comments, if any, with respect to this relay
WebHMI	Write relay IP address, Username and Password as
information	and if specified in the product (relay) provided if
	relay supports WebHMI feature.

3.7.2 *View/Edit* relay:

User can select *View/Edit* to view and edit relay information.





Relay location can be changed within the substation by modifying the information in *Edit relay*.

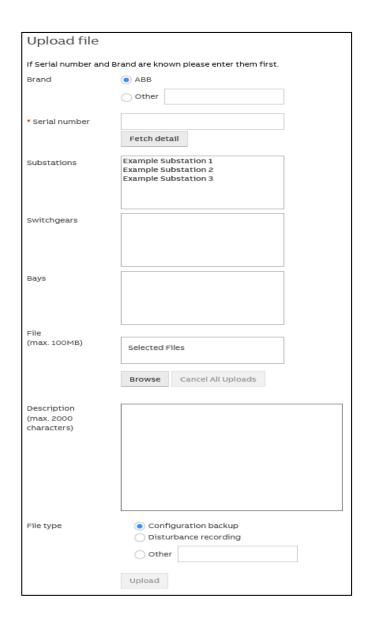
In addition to editing relay information, user can also:

- Upload files related to the relay
- View/Download Firmware updates for the relay
- *View* list of modules installed in the relay
- View/Add/Delete email notification
- View/Add/Delete Backups, Disturbance recording, files
- Replace Relay

3.7.2.1 Upload

User can *upload* configuration backup/disturbance recording, other type of files to a relay which is already available under registered substations.

Information about relays such as serial number, brand, substation, switchgear, and bay will be available automatically in the text fields. User just need to select the files and *Upload*.



Files can be selected through *Browse* option. Necessary description and file type can be selected before selecting *Upload*.

Description (max. 2000 characters)	
File type	Configuration backup Disturbance recording Other
	Upload

Following message will appear after successful uploading of the files.

Your file(s) uploaded successfully

Any files you cancelled before completion were not uploaded.

Back

3.7.2.2 Firmware updates:

Firmware updates are displayed which can be downloaded or deleted. Firmware update feature provides the firmware update package that contains the needed binary files, a detailed release note, and guidelines on how to perform the update. The asset owner has the opportunity to decide both whether and when the firmware update is implemented. The ideal time would be during periodic testing or a maintenance break.



3.7.2.3 Modules:



List of modules inside the relay is shown and it gives following information:

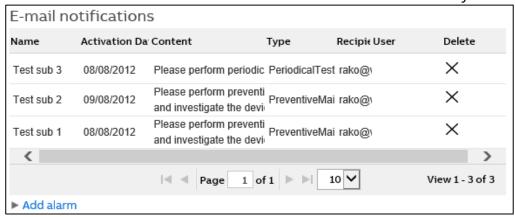
Serial number	Indicates serial number of the module
Part name	Indicates name or description of the module
Location Id	Indicates location of module in the product (relay)
Revision	Indicate the revision status of the module
Test date	Indicates module test date



All the above information is read only parameter and is available provided relay is registered in relay database.

3.7.2.4 Email notifications:

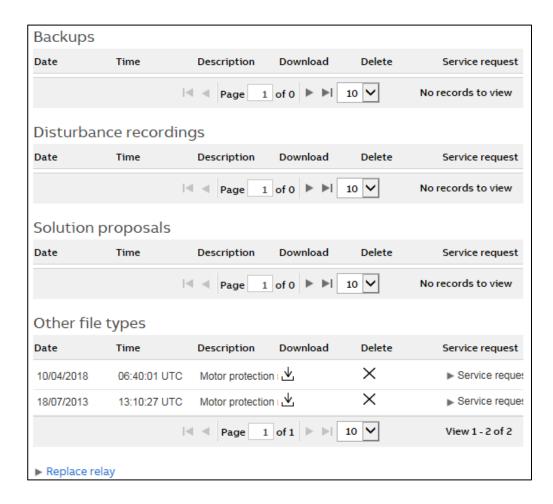
Provides information of email notifications created under this relay.



Email notification can be created by selecting *Add alarm* available below *Email notifications* table.

3.7.2.5 Backups, Disturbance recordings, Solution proposals, Other file types:

User can see the list of uploaded configuration files, disturbance recordings, solution proposals and other type of uploaded files. More information is available such as details of user who has uploaded those files with date and time stamp as well as file description. *Download* option facilitates user to download the file from Data Care to local computer. User can *delete* the file permanently from this view. Deleted file will be still available in **Recycle Bin**. User can *restore* the file back from **Recycle Bin** to its original location or permanently delete it so as to remove it from substation structure.



3.7.2.6 Replace relay

Replace relay option is available below the **Other file types** table. User can replace information of particular relay with another relay by selecting **Replace relay** option. This may be required during replacement of particular relay for maintenance purpose or during replacement of old relay with healthy relay.



If relay used as replacement is not available in Data Care database, then User has to create new relay first in <u>My</u> relays before using it as replacement for other relays.

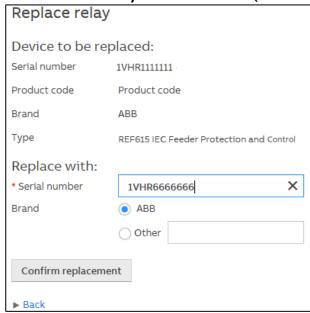
For example, if relay sr. no. 1VHR1111111 is to be replaced with another relay having sr. no. 1VHR6666666 then the process of *Replace relay* in Data Care database shall be as follows:

Consider that we are in *Edit relay* section of relay having sr. no. 1VHR1111111



Then select *Replace relay* option.

Following screen will appear wherein the information of new relay can be described in *Replace with*: fields (here it's 1VHR6666666)



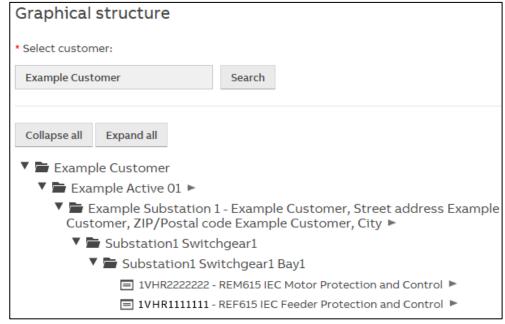
Then select *Confirm replacement*.

This changed relay information will be available under 'Relay details' of replaced relay (thus here it is 1VHR6666666). Appended screen is shown for 1VHR6666666

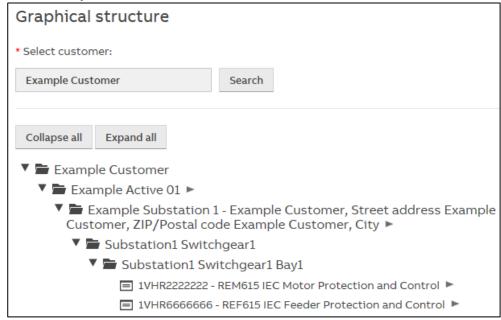


The changes can also be viewed in Graphical structure

• Before replacement



After replacement





User can only use own relay or relays which do not belong to any customers (companies) as a replacement. Otherwise, following message will be shown:

· Cannot replace relay because replacement belongs to another substation which you do not serve or own.



If relay which is to be used as a replacement already belonged to another bay/switchgear/substation of the same customer (company), following message will be shown:



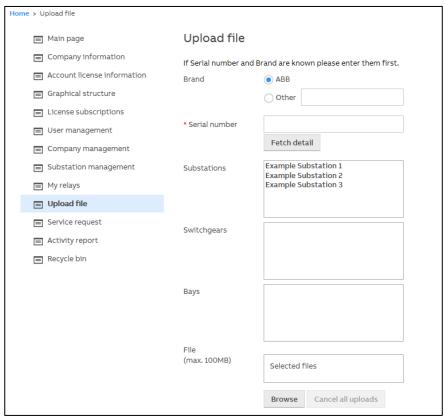
- Replace: the old connection between replacement and substation will be removed and replaced by new connection of replacement and new substation.
- *Cancel*: nothing happens (Relay will not be replaced).

3.8 Upload file

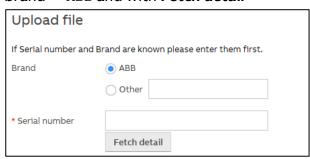
User can *upload* configuration backup/disturbance recording, other type of files to particular relay which is already available under registered substations.

Upload file	
If Serial number and B	grand are known please enter them first.
Brand	ABB
	Other
▼ Serial number	
	Fetch detail
Substations	Example Substation 1 Example Substation 2 Example Substation 3
Switchgears	
Bays	
File (max. 100MB)	Selected Files
	Browse Cancel All Uploads
Description (max. 2000 characters)	
File type	Configuration backup Disturbance recording Other
	Upload

If the files are to be uploaded through **Upload file** section then the information about *Serial number, Substations, Switchgears, Bays* need to be specified manually.



Data for ABB relay can also be fetched by entering *Serial number,* brand -> ABB and with *Fetch detail*



Files can be selected through *Browse* option. Necessary description and file type can be selected before selecting *Upload*.

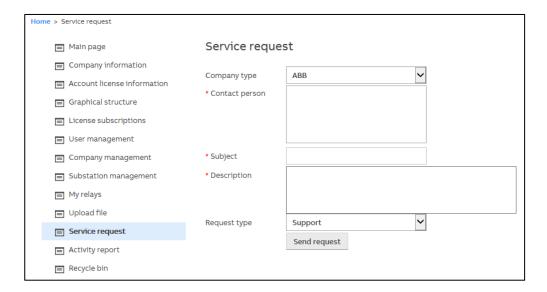
Description (max. 2000 characters)		
File type	Configuration backup Disturbance recording Other	
	Upload	

Following message will appear after successful uploading of the files.

Your file(s) uploaded successfully
Any files you cancelled before completion were not uploaded. Back

3.9 Service request

User can send requests for getting Support or Service from ABB and Subcontractor as registered in the License subscriptions.



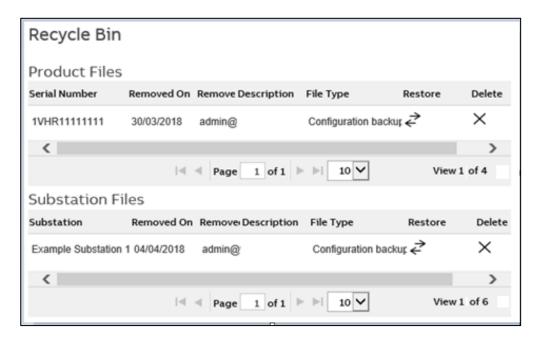
Company	Select ABB or Subcontractor depending on the
type	support or service request to be assigned.
Contact	List of contact person appears after selection of
person	Company type. Select the desired contact person.
Subject and	Subject and Description can be specified in detail for
Description	the selected <i>Request type</i>
Request type	Support or Service option can be selected

Send request then send the request to the corresponding email address of selected *Contact person* from ABB or Subcontractor.

3.10 Recycle bin

User can,

- View product and substation files that are deleted by users
- Restore the deleted files back to users account
- Permanently delete the files



4 Data Care Operations

This chapter provides the list of common operation that 'Engineer' can do in Data Care.

4.1 Adding new relay

- Is the switchgear and bay where the relay is located already available in Data Care?
- If NO, add the switchgear and bay under Substation Management > View/Edit Substation > Manage Substations
- If YES, proceed to My Relays > Add Product

4.2 Upload file to relay

- Navigate to the relay where file should be uploaded in the <u>Graphical</u> <u>Structure</u> or use the Quick search function in the <u>Main Page</u>.
- In the Edit Relay page, click the **Upload** button.

4.3 Download file from relay

- Navigate to the relay where file should be uploaded in the <u>Graphical</u> <u>Structure</u> or use the Quick search function in the <u>Main Page</u>.
- In the Edit Relay page, go to the <u>Backups, Disturbance recordings,</u> <u>Solution proposals, Other file types section</u>. Proceed to download the required files

4.4 Find other engineer/ABB contact

Navigate to the substation where the relay is installed in the <u>Graphical Structure</u>, scroll down to the <u>Contact persons</u>

4.5 Set Email notification

- To create Email notification for the substation, navigate to the substation where the relay is installed in the Graphical Structure, and click Add Alarm under Email Notification
- To create Email notification for the *relay*, navigate to the relay in the <u>Graphical Structure</u> or use the Quick search function in the <u>Main</u>
 <u>Page</u> and click <u>Add Alarm</u> under Email Notification

4.6 Send service request

• Navigate to the <u>Send Service Request</u> page and fill up the details



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