



ABB OY DISTRIBUTION SOLUTIONS SERVICE

# **ABB Ability™ Backup Management for electrical systems - Data Care**

Data-sharing and backup service for protection relays

1MRS757945



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# **ABB Ability™ Backup Management for electrical systems – Data Care**

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- Service description
- Customer benefits
- User groups
- Service levels
- Cyber security and backup process



# Introduction

# Introduction

## Business case (1/3)

Customer segments for medium-voltage (MV) and low-voltage (LV) switchgear

- Nuclear
- Marine
- Oil, gas and chemicals
- Food and beverage
- Utilities
- Mining and infrastructure

Industrial Internet of Things (IIoT)

- Growing number of electronic devices, such as gateways and sensors, installed in the switchgear

MV protection relays

- Over 1,500,000 ABB protection relays of different ages installed in utilities and industries worldwide



# Introduction

## Business case (2/3)

- The diminishing knowledge of older protection relays and versions together with the complexity of modern protection relays are increasing the criticality of maintaining documents, such as configuration and setting files, disturbance recordings, drawings, wiring diagrams and technical solutions.
- Smooth relay operation requires current, relevant and reliable information to be easily available 24/7 at all user levels.



# Introduction

## Business case (3/3)

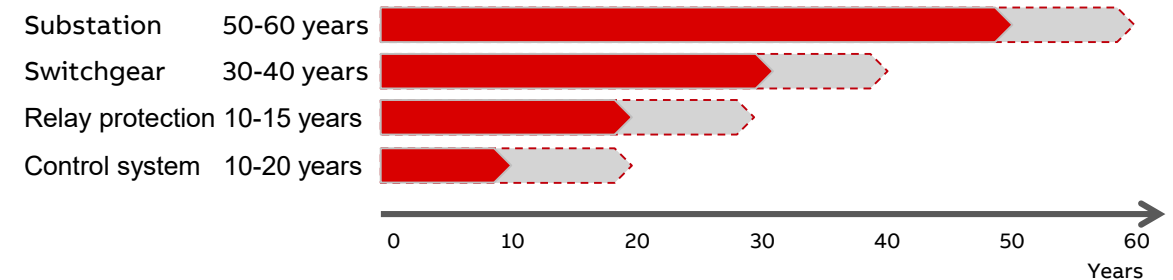
Documentation and other information required to operate and maintain the equipment (other than product/component manuals) are usually delivered in printed format and on DVD.

- Relay configuration and engineering tools
- Electrical schematic drawings and technical documentation
- Firmware and software updates, for instance, security patches

### Disadvantages of existing approach

- Important data and product knowledge restricted to individual users
- CDs, DVDs, external hard disks and printed documents at risk of being misplaced, lost or subject to possible damage
- Limited data-sharing
- Demanding updates and scalability

### Estimated lifetime of assets in the distribution network



# Introduction

ABB Power Care – the framework for customer support agreements

ABB Power Care	Entry level	Level 1	Level 2	Level3
Skills development services	Product training list	Product training	Application training	Coaching services
Emergency maintenance services	Single point of contact	Technical support with agreed response time	Call-out support with agreed response time	Spare parts assessment and management
Diagnosis and condition assessment services	Documentation of installed base and preliminary survey	Asset condition and risk assessment	Asset monitoring	Remote asset monitoring
Self-maintenance services	Installed base life cycle status report	Manuals and instructions on-line	On-line support for self-maintenance	Data Care
Delivered maintenance services	Periodic technical assessment	Protection and control engineering services	Switching apparatus engineering services	Full switchgear engineering services

Data Care is one of Power Care's most advanced services.



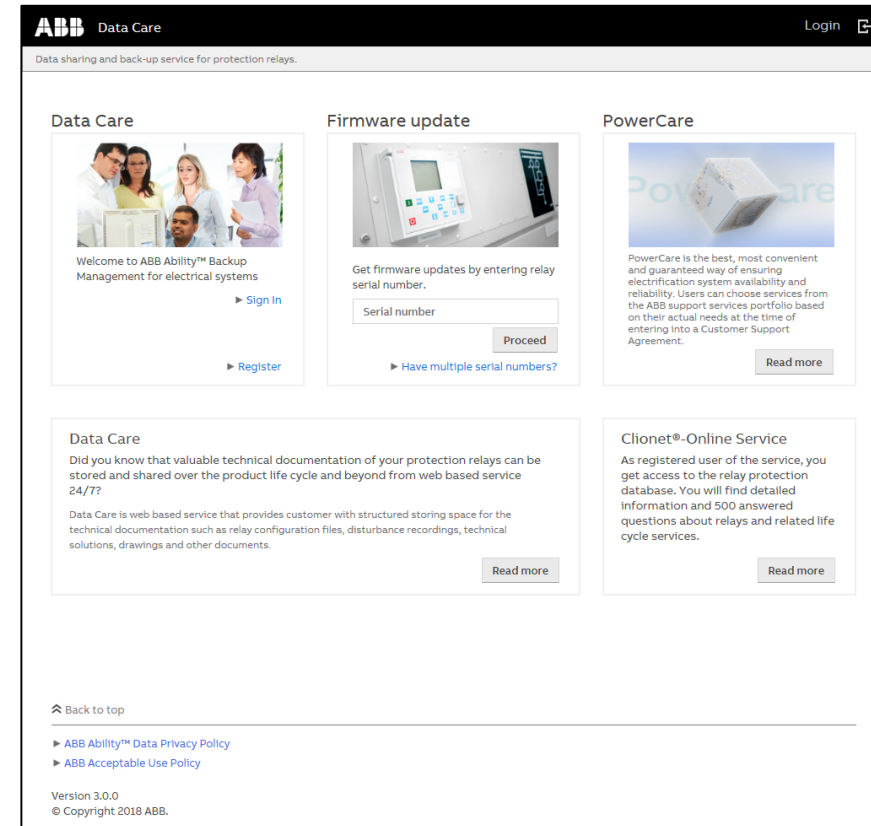
# Service description



# Service description

## Data Care – cloud-based approach to device data backup (1/2)

- Secures technical information on protection and control relays, as well as any other related documentation, throughout their entire life cycle
- Integrated into Protection and Control Manager PCM600, the setting and configuration tool for Relion® protection relays
  - When connecting to a protection relay, the latest configuration (hardware and software) is stored and automatically uploaded to the cloud.
- Configuration version management
- Storing of process information, such as disturbance recordings, for in-depth analysis
- Remote support and expertise easily accessible
- Firmware updates available for download



# Service description

## Data Care – cloud-based approach to device data backup (2/2)

- Easy access to service contract, substations, bays and information on protection relays with convenient graphical structure
- Easy management of substation information, such as adding and deleting of switchgear, bays, protection relays and e-mail notifications
- User-friendly relay management feature for easy searches, edits, and additions of protection relays and their related technical information files
- Individual access rights
- User accounts created, and user rights defined and granted by own administrator to employees and subcontractors
- Future-proof with possibility to add and edit information on retrofitted switchgear and protection relays, without any additional approvals or changes to the graphical structure

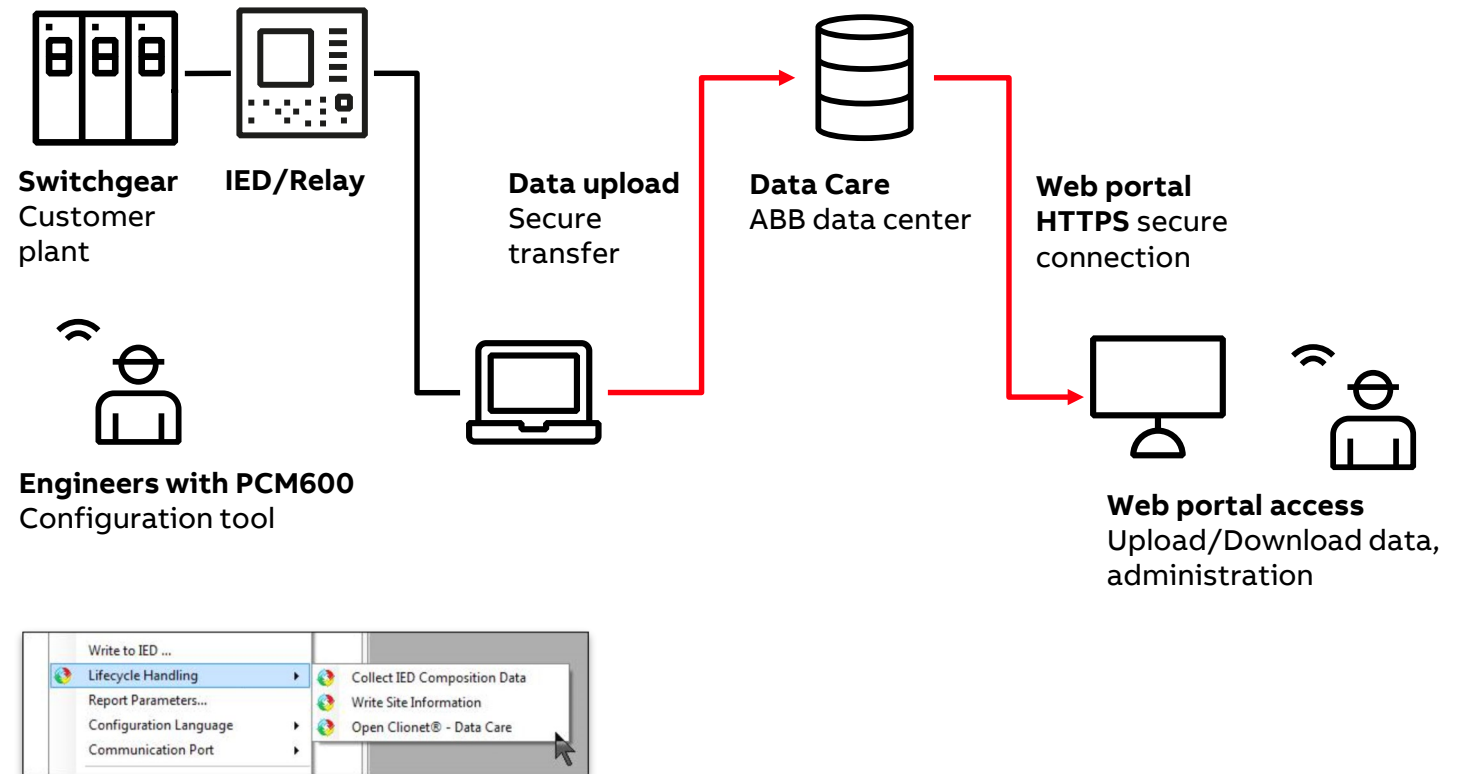


# Service description

## Use case

### Relay data from existing relays

- Automatic transfer of configuration files for selected Relion relays via PCM600.
- Upload whenever an internet connection is available
- Manual upload possible if required
- Easy account, plant and device administration via the Data Care Web portal
- Free up- and download of data for authorized users
- Possibility to manually add protection relays and their related technical information files





# Customer benefits

Customer benefits

# Customer benefits

## Convenient and easy data-sharing and backup (1/2)

Easy access online to technical information on your protection relays – anywhere, anytime

- Efficient sharing of technical information among employees, subcontractors and service providers
- Individual user accounts and access rights at substation level
- All technical information on your protection relays conveniently stored in one place – throughout their entire life cycle

### File management

- Automatic transfer of configuration files and disturbance recordings for selected ABB protection relays via PCM600 v. 2.5 or later (for relays registered via the ABB Life Cycle Service Tool in PCM600)
- Manual uploading and downloading of files (file size max. 100 MB)

**No special skills required**

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# Customer benefits

## Convenient and easy data-sharing and backup (2/2)

### Easy administration

- Only basic computer skills required to manage the graphical substation structure
- Company's own administrator maintains company account, creates user accounts and defines user rights

### Added value

- User-defined email notifications for periodical testing and preventive maintenance
- Email notification template of your choice for other purposes
- Activity reports for your administrator

**Easy administration and file management**



# User groups

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# User groups

## Protection relay user groups

- Field crew
  - Installation and commissioning
  - Maintenance personnel
- Protection relay specialists and engineers
- Operators
- Subcontractors
- Service providers





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# User groups

## User groups within ABB

- Life cycle services
- Field services
- Maintenance services
- Modernization services
- Consulting services
- Technical support

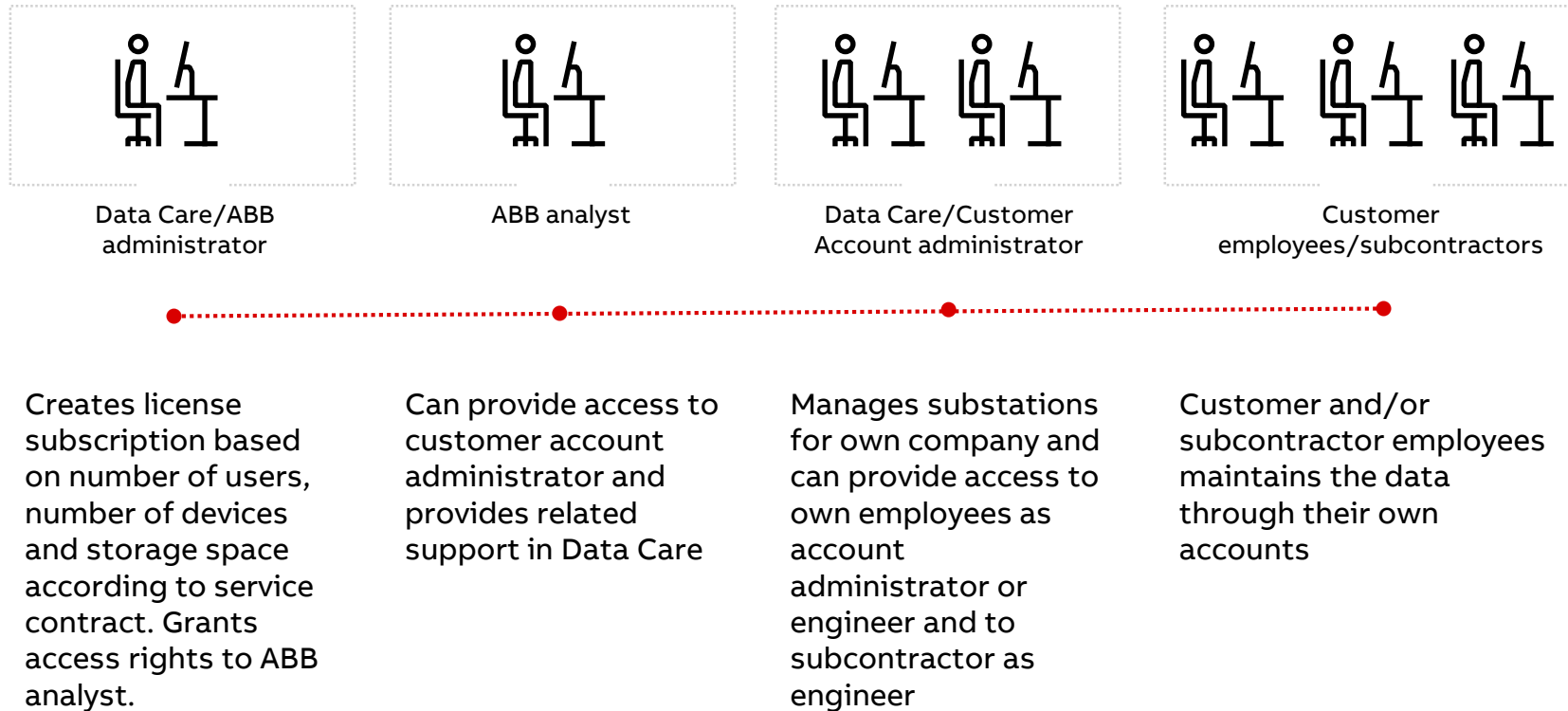




# Service levels

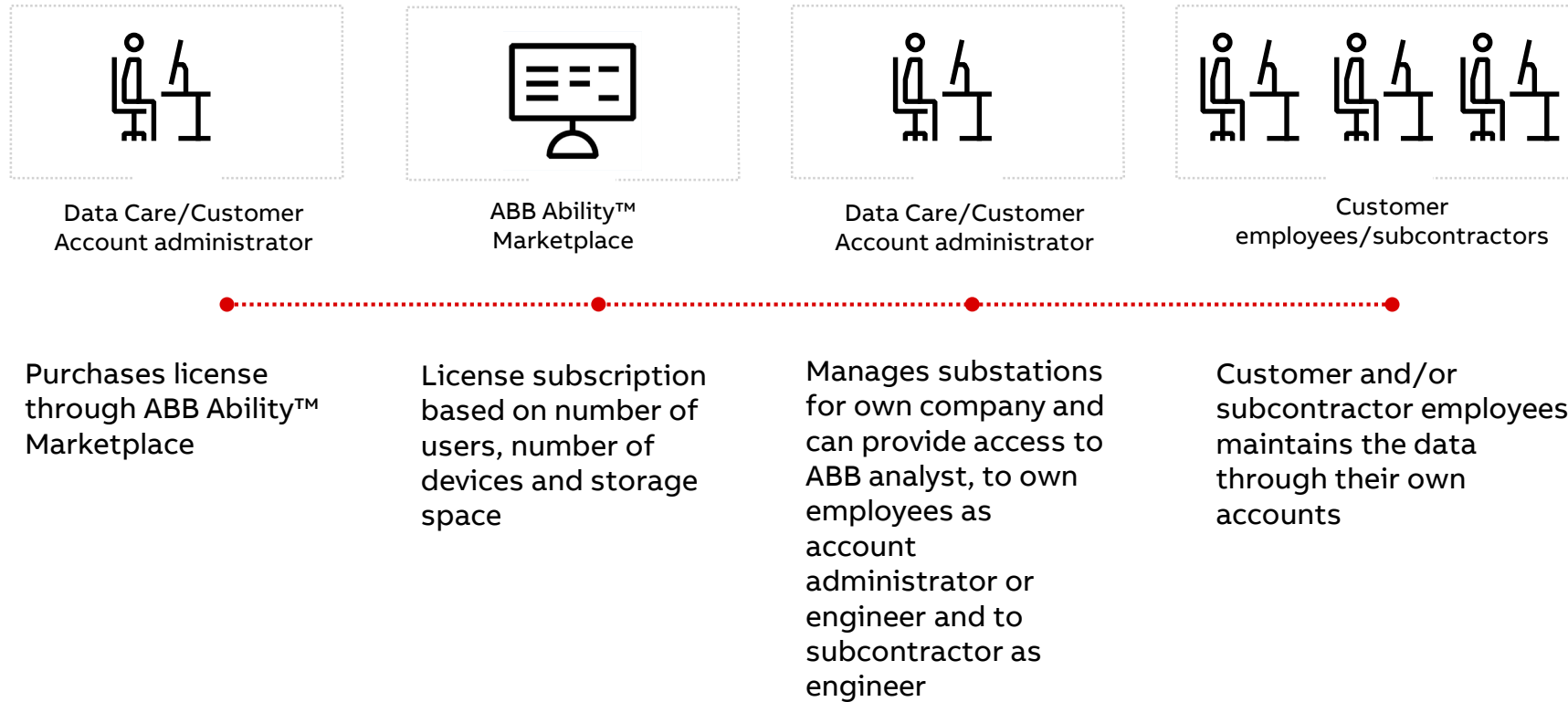
# Service levels

## Subscription process through ABB Power Care Customer Support Agreement



# Service levels

## Subscription process through ABB Ability™ Marketplace



# Service levels

User access levels (1/2)

## Account administrator (customer)

Main page
Company information
Account license information
Graphical structure
License subscriptions
User management
Company management
Substation management
My relays
Upload file
Service request
Activity report
Recycle bin

## Engineer (customer/subcontractor)

Main page
Company information
Graphical structure
Substation management
My relays
Upload file
Service request
Recycle bin



# Service levels

User access levels (2/2)

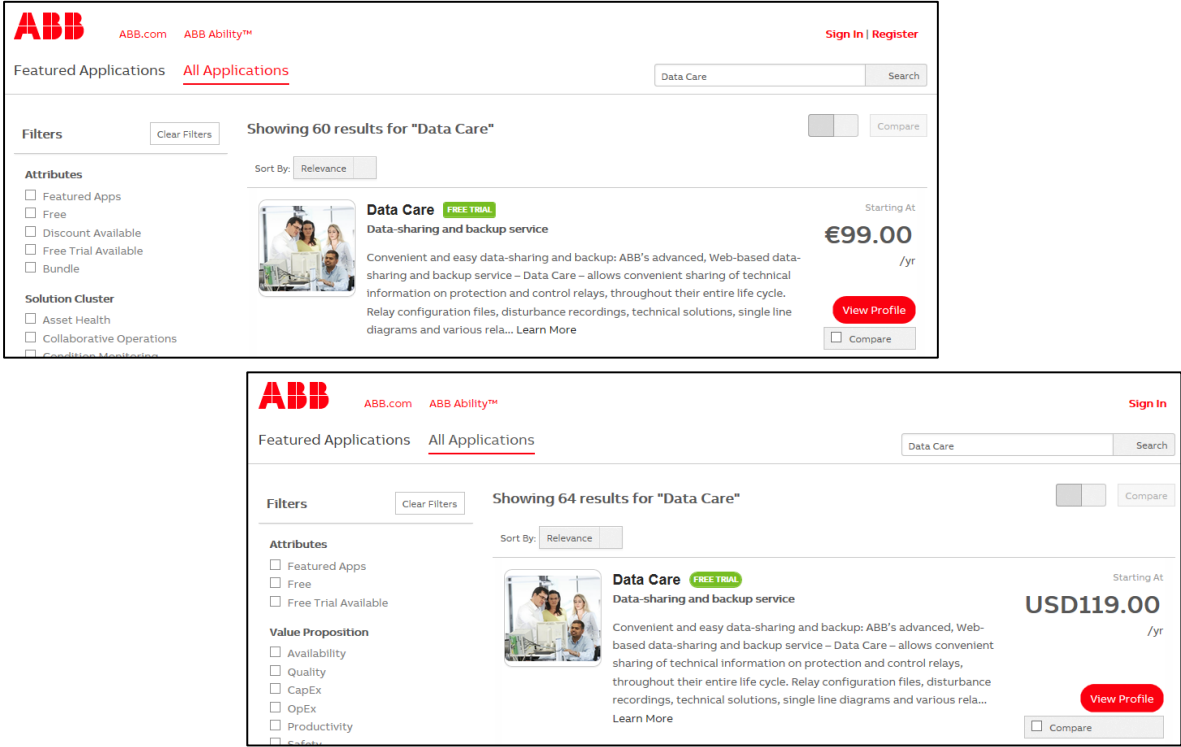
## ABB analyst

Main page
Company information
Account license information
Graphical structure
License subscriptions
User management
Company management
Substation management
My relays
Upload file

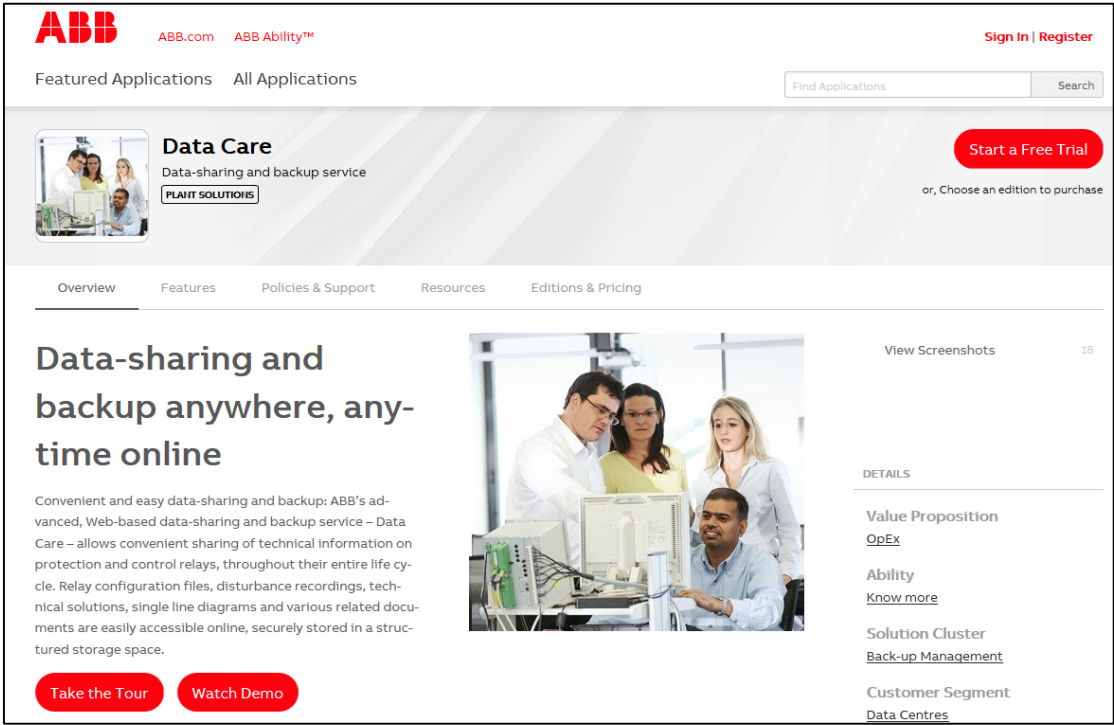
# Service levels

## Ability™ Marketplace

Ability™ Marketplace: <https://eu.marketplace.ability.abb/home>  
Ability™ Marketplace: <https://us.marketplace.ability.abb/home>



## Data Care in Ability™ Marketplace



# Service levels

## Subscription-based pricing

### Main subscription

Small

€99.00 / year

1 YEAR CONTRACT

Try For 3 Months

Included

5 Users

20 Devices

2 Gigabytes

Medium

€499.00 / year

1 YEAR CONTRACT

Try For 3 Months

Included

10 Users

100 Devices

10 Gigabytes

Large

€999.00 / year

1 YEAR CONTRACT

Try For 3 Months

Included

15 Users

500 Devices

50 Gigabytes

Extra Large

€1,999.00 / year

1 YEAR CONTRACT

Try For 3 Months

Included

30 Users

5000 Devices

500 Gigabytes

Small

USD119.00 / year

1 YEAR CONTRACT

Try For 3 Months

Included

5 Users

20 Devices

2 Gigabytes

Medium

USD599.00 / year

1 YEAR CONTRACT

Try For 3 Months

Included

10 Users

100 Devices

10 Gigabytes

Large

USD1,199.00 / year

1 YEAR CONTRACT

Try For 3 Months

Included

15 Users

500 Devices

50 Gigabytes

Extra Large

USD2,399.00 / year

1 YEAR CONTRACT

Try For 3 Months

Included

30 Users

5000 Devices

500 Gigabytes

### Add-on

Data Care Add-on Users

€299.00 / year

Buy Now

Included

15 Users

Data Care Add-on Devices

€1,599.00 / year

Buy Now

Included

5000 Devices

500 Gigabytes

5 Users





# Cyber security and backup process

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# Cyber security and backup process

## Cyber security

Irregular and regular cyber security tests according to ABB's strict security policies, procedures and guidelines

- Protected by antivirus program
- Patched monthly if necessary patches have been published by software vendors
- Servers hardened according to hardening guidelines
- Monitored 24/7 by server vendors
- Continuous system vulnerability scans

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# Cyber security and backup process

## Server backups and restore

- Server backups done on daily basis by service vendor
- Retention policy based on ABB's minimum security baseline
  - 12 months old data ready to be restored (variations may apply)
- Restore test every 6 months
- Disaster recovery test once a year (mostly based on SOX requirements)

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# Cyber security and backup process

## Best business practice security methods

- Compliance with ABB's strict security policies, procedures and guidelines
  - Continuously reviewed and updated according to the global IS thread situation
- Personnel trained through mandatory global security awareness programs
- Only authorized personnel have physical access to the servers
- IS architecture reviewed and approved by certified IS security professionals

**ABB**