



My Control System (web)

End customer data upload and analysis process



Introduction

This Training describes the process of data upload and analysis to My Control System for end customers.

The process description starts with the upload process of the System data file to My Control System and does not include the data collection process on site. A dedicated training plan for data collection is available at ABB myLearning [\(Link\)](#).

It includes the following chapters:

1. My Control System login and SID selection
2. Uploading the system data file to My Control System
3. Viewing the results & explanations of the KPI analysis in My Control System
4. Creating a paper-based report (optional)

1. Select the SID

The screenshot displays the myABB business portal interface. At the top, the 'MY CONTROL SYSTEM' widget is shown with a table of systems. The table has columns for SYSTEM NAME, SID, COMPANY, AUTOMATION SOFTWARE MAINTENANCE, and LATEST SCAN. A filter is applied to the SID column with the value '75493'. The table shows one system: Absorber, 800xA, USA, with SID75493, Western Chemicals Inc. Glo..., Active status, and a latest scan on 2021-07-23. Below the table are buttons for 'Demo mode' and 'Access My Control System'.

Below the widget, a dashboard overview is visible with various KPIs and status indicators:

- PERFORMANCE KPIS:** 7 Findings. Last collection: 3 months ago. Previous collection: 4 months ago. Affected areas: System Applications (2), Computer (3), ABB Software Rollups (1).
- SECURITY KPIS:** 19 Findings (down 144). Last collection: 3 months ago. Previous collection: 4 months ago. Affected areas: Policy Settings (151 up, 7 down, 18 total), Software (1).
- SOFTWARE KPIS:** 1 Findings. Last collection: 3 months ago. Previous collection: 4 months ago. Affected areas: Security patches (1).
- HARDWARE LIFECYCLE:** 5 Replacements available. Last collection: 3 months ago.
- CONTROL SYSTEM LIFECYCLE:** 0 Updates available. Your software is up to date.
- EVENT LOAD:** 132 Events (71 Critical, 61 High). Status: Online. Time period: last 31 days.
- ALERTS AND NOTIFICATIONS:** 360 Notifications. Status: Online. Time period: last 31 days.
- ASSETS:** 0 Assets.

1. Open myABB business portal (<https://myportal.abb.com/>)
2. Browse for the My Control System widget
3. Enter the SID in the SID column filter for which you want to upload the collected system data file (SDF). In case the SID is not shown in the list, please contact your local ABB contact.
4. Click on the SID to enter the SID system status page

2. Upload the system data file

The screenshot displays the ABB My Control System web interface. In the top right corner, there is a database icon (cylinder) which is highlighted with a red box. Below the navigation bar, the 'KPI' tab is selected, and a blue button labeled '+ Add data set' is also highlighted with a red box. A pop-up window titled 'Add data set' is open, providing instructions on how to create a new data set or import an existing one. It includes radio buttons for 'Create new data set' (selected) and 'Import existing'. A text field for 'Name of data set' contains 'Upload 2023-02-14 16:23'. Below this is a dashed box for 'Add System Data File' with a file icon and the text 'Drop files here', accompanied by a '+ Add File' link. A 'Select project type' dropdown menu is set to 'Automated KPIs (Benchmark/Fingerprint)'. At the bottom of the pop-up are 'Close' and 'Save' buttons.

Add data set

Create a new data set if you want to upload a System Data File from your system scan. If you have previously exported a data set from e.g. another MCS installation and want to synchronize it with this MCS instance, please select import existing.

☒ Create new data set
☐ Import existing

Name of data set *

Upload 2023-02-14 16:23

Add System Data File


Drop files here

+ Add File

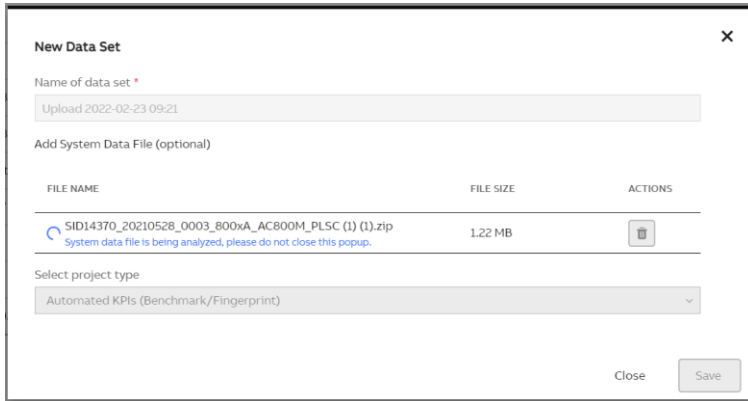
Select project type

Automated KPIs (Benchmark/Fingerprint)

Close Save

1. Go to the data sets section  in the upper right corner
2. Go to the “KPI” tab and click on „Add data set“
3. A new tab with a pop-up will be opened
4. Choose “Create new data set”
5. Enter a name for the data set or use the automatically created name (Upload yyyy-mm-dd hh:mm)
6. Drag & Drop the System data file (the output file of your collection process with the MCS-DC) into the popup and click on the „Save“ button

2. Upload the system data file



The screenshot shows a 'New Data Set' dialog box with the following elements:

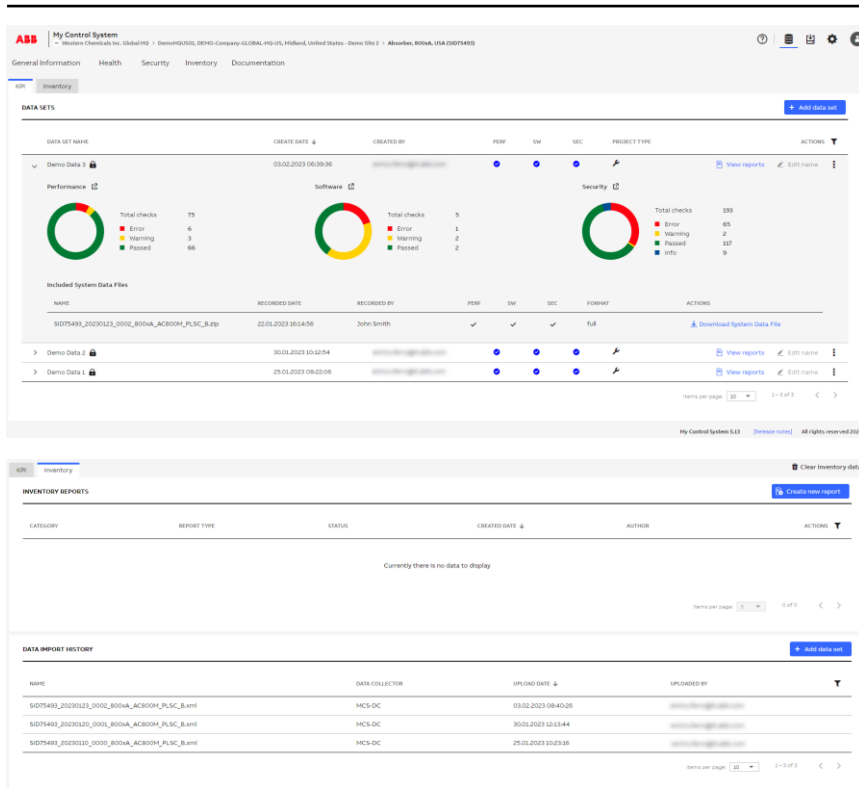
- Title:** New Data Set
- Name of data set:** A text field containing 'Upload 2022-02-23 09:21'.
- Add System Data File (optional):** A section containing a table with the following data:

| FILE NAME | FILE SIZE | ACTIONS |
|--|-----------|--------------|
| SID14370_20210528_0003_800xA_AC800M_PLSC (1) (1).zip <small>System data file is being analyzed, please do not close this popup.</small> | 1.22 MB | [Trash icon] |
- Select project type:** A dropdown menu with the selected option 'Automated KPIs (Benchmark/Fingerprint)'.
- Buttons:** 'Close' and 'Save' buttons at the bottom right.

4. The system data file is analyzed
5. Once the analysis is completed you can close the pop-up.
6. The uploaded data is now available in the data sets page and the dashboards of the different categories.

Please note the availability of these categories depends on your system family and the selection in the collection process.

2. Upload the system data file



The data set page has 2 different tabs (KPI & Inventory)

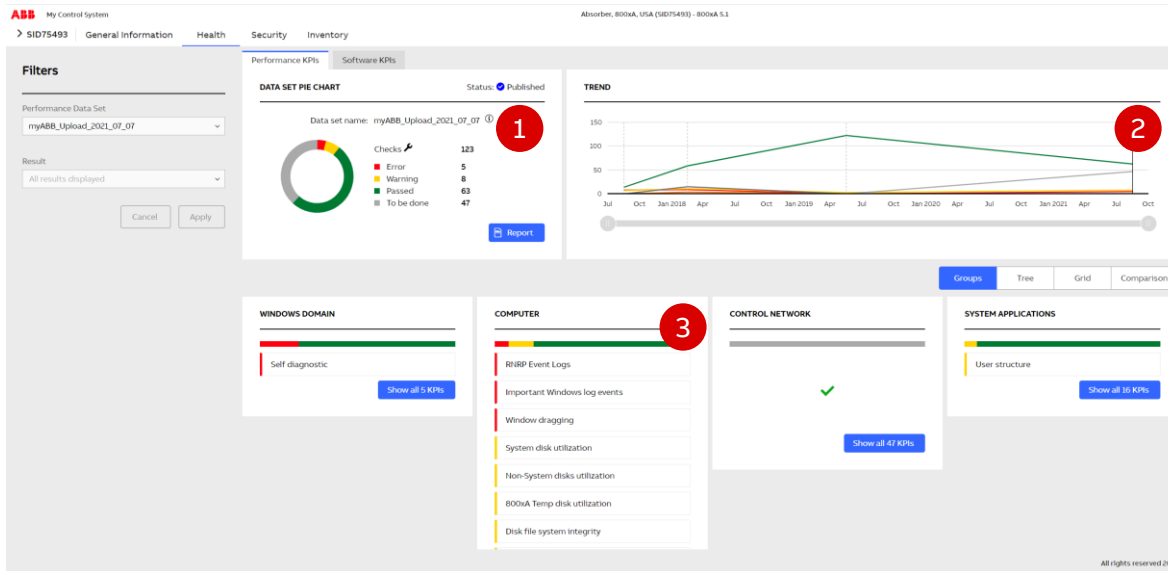
The **KPI tab** shows all collected data sets and their details, namely:

- Name, Create date and person, Collected categories (Performance, Software, Security). The checkmarks indicate which category has been collected. The blue checkmarks indicate that this category has already been published. Actions give you all the necessary functionalities to manage and edit your data sets.
- You can expand each data set to see the analysis results and more details and jump to the different category overview pages via the hyperlink next to the heading (e.g. “Performance”).

The **Inventory tab** shows all created inventory / lifecycle reports and data history of the imported inventory data.

Inventory always shows the latest status which is a combination of all imported data from the past. Use the “clear inventory data” button to delete all old inventory data and upload a newly collected file.

3. View the analysis results



Category Overview Page

Use the filter area on the left side to choose the data set which should be reviewed. Additionally, you can filter for specific results (e.g. Error).

The main section of the screen displays 3 different widgets:

1. A pie chart in the top-left that presents all KPI results from the selected data set in an easy and comprehend manner
2. A trend graph in the top-right, that gives you an overview how results changed in time for the currently selected SID
3. KPIs and their results at the bottom which can be browsed using different views that will help you easily find the most relevant data.
Click on any KPI in any view to access the corresponding KPI details page

3. View the analysis results

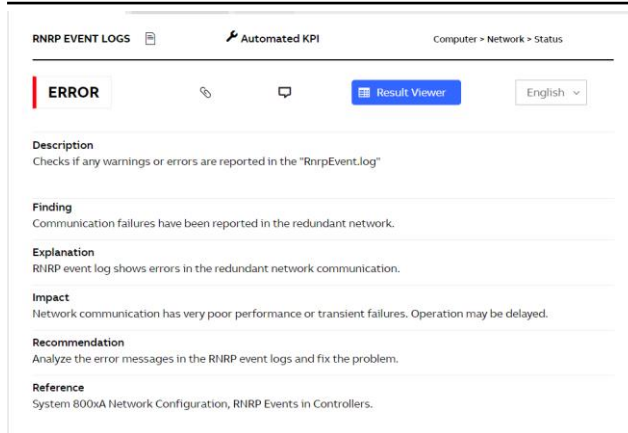
The screenshot displays the 'KPI details' page for 'CPU LOAD, %A'. The interface includes a left-hand filter pane and a main content area. The main content area shows an 'ERROR' status with a description, finding, explanation, impact, recommendation, and reference. The 'SUGGESTED ACTIONS' section provides a list of steps to resolve the issue, and the 'MANUAL CHECK METHOD' section provides commands for Windows and PowerShell. The 'EVALUATION CRITERIA' section shows two criteria: 'ERROR IF Average CPU % > 95' and 'WARNING IF COUNT(CoreX % > 99) > 0'.

KPI Details Page

- The KPI Details page shows you all relevant information concerning one specific KPI
- There are 4 widgets available:
 - KPI result
 - Suggested actions *
 - Manual Check Method *
 - Evaluation criteria
- For some KPIs additional information is available via the documentation icon next to the widget name.

3. View the analysis results

1. KPI Result widget



Result Viewer

Self diagnostic

Search Result Export to Excel

| SERVER | SUCCESS | CHECK | AFFECT SERVER |
|-----------|---------|-----------------|---------------|
| 500-ASDC2 | False | Services | True |
| 500-ASDC2 | True | Connectivity | True |
| 500-ASDC2 | True | Advertising | True |
| 500-ASDC2 | True | FullEvent | True |
| 500-ASDC2 | True | DPSEvent | True |
| 500-ASDC2 | True | SpillCheck | True |
| 500-ASDC2 | True | KcsEvent | True |
| 500-ASDC2 | True | KnownOffloaders | True |
| 500-ASDC2 | True | MachineAccount | True |
| 500-ASDC2 | True | HCNetDesc | True |

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Shows the KPI result of the analysis including additional information, descriptive text elements and actions that are necessary to solve the reported issue.

Following actions are available:

- You can add different attachments and a comment for each KPI via the corresponding buttons next to the analysis result.
- The Result viewer gives you the possibility to access the raw data that was collected for each device for the specific KPI. You have the possibility to export this specific KPI, all KPIs from this category or all KPIs, to Excel for further investigations. *


Additional descriptions are available for troubleshooting the issue. These are:

- Finding - general information about how the KPI affects your system
- Explanation - technical explanation of the reported result *
- Impact - short description of the expected or possible consequences for plant operation *
- Recommendation - recommendations and required actions that are necessary to solve the reported issue *
- Reference – references to ABB user manuals *



3. View the analysis results

2. Suggested actions *

SUGGESTED ACTIONS

System backups shall be created regularly in accordance to the referenced user documentation.
It is recommended to configure a scheduled backup creation.
Check backups concerning successful creation.
Remove erroneous backups to avoid unintentional restorage from them.

Gives detailed information about the actions to take to resolve this issue

3. View the analysis results

2. Manual check method *

MANUAL CHECK METHOD

Open in 800xA Plant Explore > Maintenance Structure > Backups
Check whether the listed backups have been successfully created (green icon).
Details can be checked within aspect Backup Info.


Explains how this KPI can be manually collected.

This is either used when:

- An issue was fixed and you do not want to run another MCS-DC scan
- A System Assessment is performed where you need to collect some of the KPIs manually.

3. View the analysis results

2. Evaluation Criteria widget

EVALUATION CRITERIA 

PASSED if no warnings or errors are reported in any event log.

WARNING if at least one warning is reported, but no errors.

ERROR if at least one error is reported.

Take special care on the following messages:

1.) "Socket error=10049, Failed to create socket for 172.16.4.72". Fix can be applied by restarting the RNRP Service on the concerned computer, using RNRP Wizard. CAUTION! If this is done on Server, the 800xA Services are restarted. Live values might get lost for a few seconds).

2.) "Suspected network loop!! same msg received twice from 172.17.80.171". See Help.

3.) "Interface blocked after detected network loop on area=21 path=0!!". This indicates a NETWORK STORM, which is a severe problem. Analyze the root cause. Inspect network switches (topology, spanning tree, log files)
- See Hints for more details.
- If ControlNetwork is affected, analyze AC 800M controller logs for messages like: "RNRP Config error: Suspected network loop, short interface block made on area=0 path=1 LP=504".

Explains more in detail how the result is calculated, or which result shall be selected (in case of manual KPIs)

- For manual KPIs the evaluation is done using the “Evaluation Criteria” widget, which explains when a KPI should be set to “Passed”, “Warning” or “Error”.
- The result is entered by clicking on the “pencil” button in the “KPI result” widget next to the result.



4. Create a report (optional)

Report Creation Characteristics

DATA SET PIE CHART

Status: Published

Data set name: Demo Data 3

Total checks

75

Error

6

Warning

3

Passed

66

Report

Performance reports

| CATEGORY | REPORT TYPE | RESULTS | STATUS | ACTIONS |
|-------------|---------------|------------------|-----------|-----------------------------------|
| Performance | Reduced | Errors only | Published | <div><div></div><div></div></div> |
| Performance | Summary | Error & Warnings | Published | <div><div></div><div></div></div> |
| Performance | Detailed | All results | Published | <div><div></div><div></div></div> |
| Performance | System Status | All results | Published | <div><div></div></div> |

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Create new report

Close

My Control System gives you the possibility to create and download all the analysis results and text elements via a dedicated report.

Click on the “Report” button either in the “System Status” widget (on the SID details page) or in the “Data Set Pie Chart” widget (on the analysis overview page).

A pop-up will open where already created reports can be accessed or new reports can be created.

Click on “Create new report”.



4. Create a report (optional)

Report Creation Characteristics

Create report for data set: myABB_Upload_2021_07_07

Category

Please select the Category

Performance

Report Type

Please select the Report Type

Reduced

The Reduced Report for Performance provides a general overview about the individual KPI result of each collected device.

Filter

Please select the Filter

Errors only

Options

Language

English

Cancel Create Report

The report wizard guides you through the different selection possibilities (category, report type, filter, options).

Following report types are available:

- **Summary** - Provides a short overview about the overall KPI results
- **Reduced** - Provides a general overview about the individual KPI result of each collected device
- **Detailed** - Provides in-depth information about the individual KPI result of each collected device and descriptive text elements for each finding ⁽¹⁾
- **Complete** - Provide in-depth information about the individual KPI result for each collected device, descriptive text elements for each finding and an appendix with all data points that were used for the analysis ⁽¹⁾
- **Benchmark** - Legacy report type that is comparable to the new “Reduced Report” type
- **Fingerprint** - Legacy report type that is comparable to the new “Detailed Report” type ⁽¹⁾
- **Assessment** - Legacy report type that is comparable to the new “Complete Report” type ⁽²⁾

Once the selection is done click on “create report”.

ABB