



AssetCentre Introduction

expanding **human possibility**®

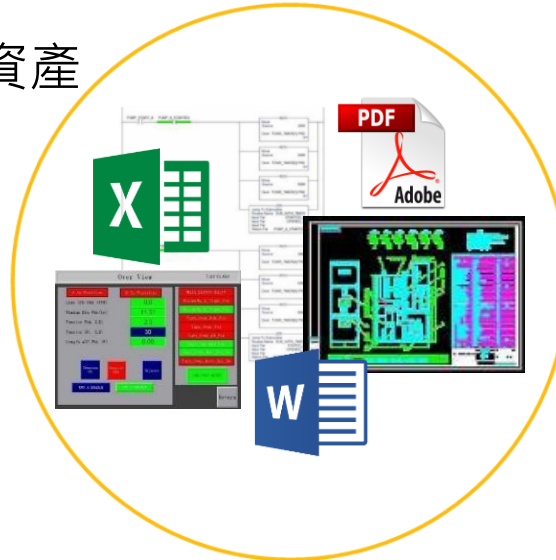


如何有效地管理廠區內的資產

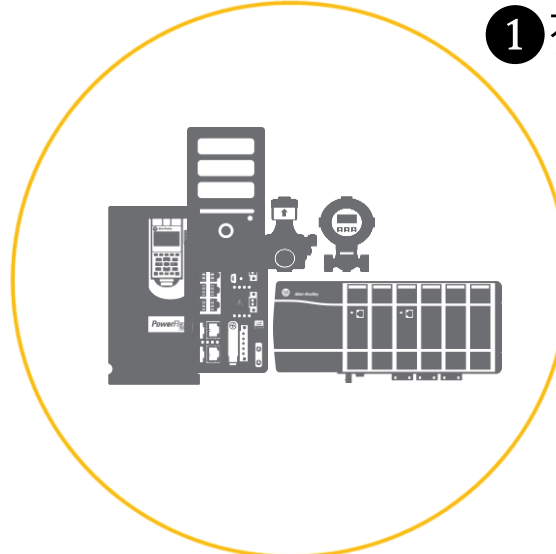
② 無形資產

常見廠務/ 資產管理所面臨的挑戰：

- 如何針對有形和無形資產進行有效管理？
- 廠內電腦壞了, 最後一版程式在哪裡？
- 如何對程式進行即時備份和有效監管？
- 如何在程式遭竄改時, 在最短時間恢復系統運行。
- 如何對各種用戶操作進行跟蹤？
- 如何提醒相關人員系統存在的問題？



① 有形資產



如何有效地管理廠區內的資產：



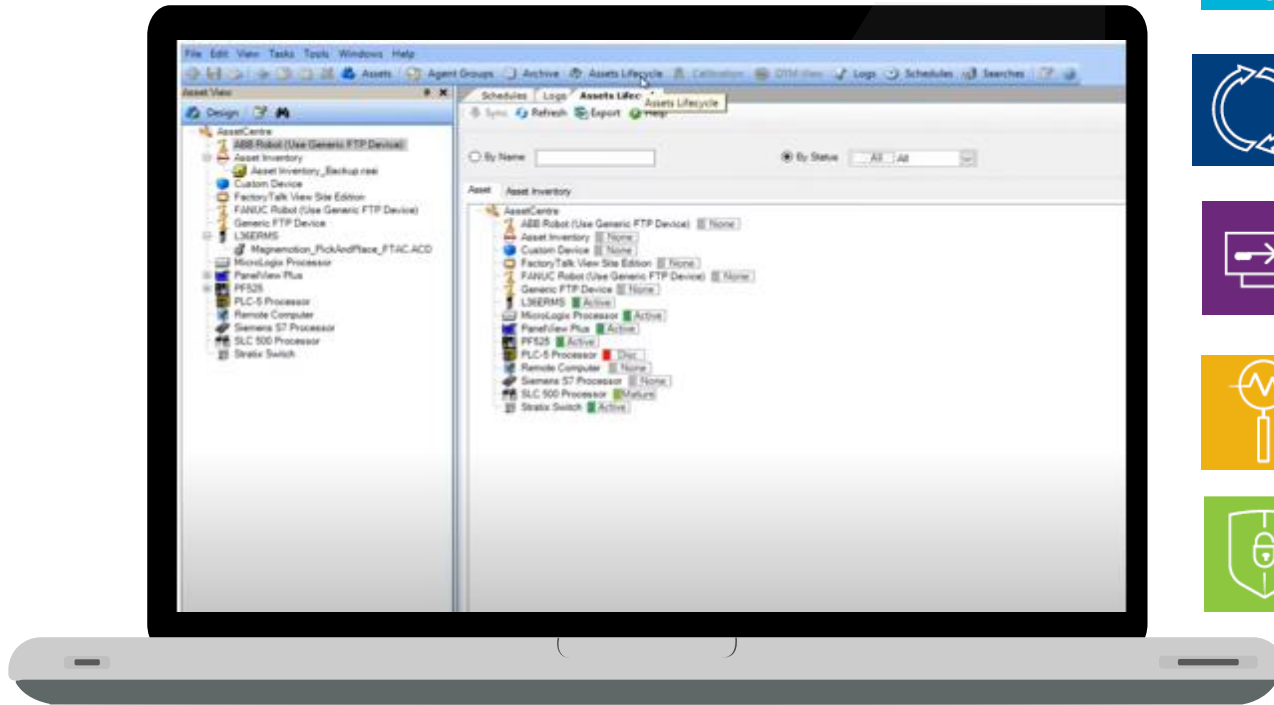
Note :

① 有形資產 (例如：PLC, VFD和儀表等)。

② 無形資產 (例如：PLC/ VFD參數設置, 產品說明書與系統圖紙)

FactoryTalk AssetCentre – 資產管理系統

- 透過以下5大層面功能, FactoryTalk AssetCentre幫助客戶建構專屬OT領域的資安防護措施：



災難復原



生命週期管理



變更和版本管理

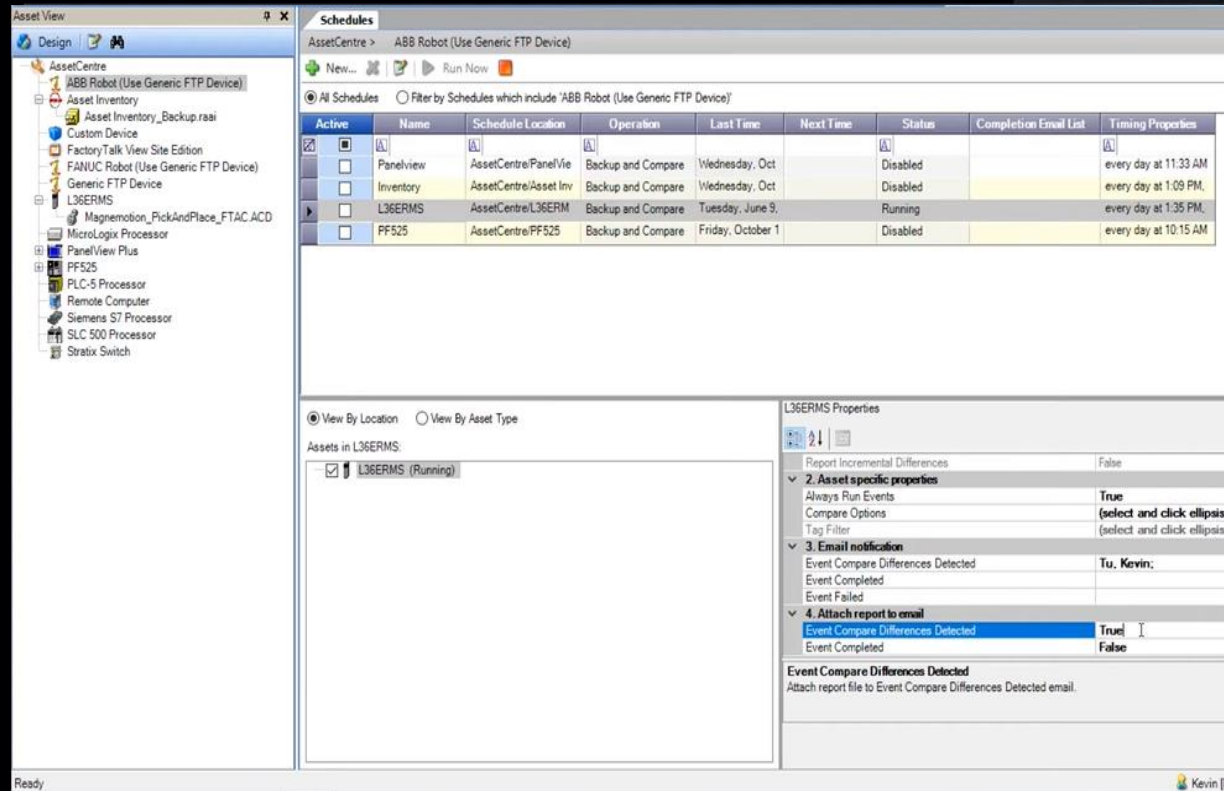


操作員追蹤紀錄



系統安全

以下範例說明FactoryTalk AssetCentre的功能



Stratix Switch
SLC 500 Processor



Remote Computer

PanelView Plus



PLC-5 Processor



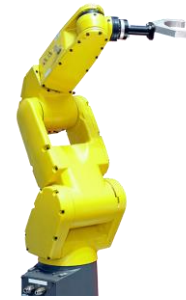
L36ERM



MicroLogix
Processor



Siemens S7 Processor
PF525



FANUC Robot



ABB Robot



此為範例圖

DISASTER RECOVERY – 災難回復

Run Now

Active	Name	Schedule Location	Operation	Last Time	Next Time	Status	Completion Email List	Timing Properties
<input type="checkbox"/>	Panelview	AssetCentre/PanelView	Backup and Compare	Wednesday, Oct		Disabled		every day at 11:33 AM
<input type="checkbox"/>	Inventory	AssetCentre/Asset Inv	Backup and Compare	Wednesday, Oct		Disabled		every day at 1:09 PM
<input type="checkbox"/>	L36ERMS	AssetCentre/L36ERM	Backup and Compare	Tuesday, June 9,		Running		every day at 1:35 PM
<input type="checkbox"/>	PF525	AssetCentre/PF525	Backup and Compare	Friday, October 1		Disabled		every day at 10:15 AM

View By Location: ☐ View By Location ☐ View By Asset Type

Assets in L36ERMS:

- ☒ L36ERMS (Running)

PLC執行比對

L36ERMS Properties

- Report Incremental Differences: False
- 2. Asset specific properties
 - Always Run Events: True
 - Compare Options: (select and click ellipsis)
 - Tag Filter: (select and click ellipsis)
- 3. Email notification
 - Event Compare Differences Detected: Tu, Kevin;
 - Event Completed: True
 - Event Failed: False
- 4. Attach report to email
 - Event Compare Differences Detected: True
 - Event Completed: False

Event Compare Differences Detected
Attach report file to Event Compare Differences Detected email.

- 排程定期比對備份檔案與線上運轉的自動化備份的程式，規劃及設定，若比對結果不同時，決定是否備份線上運轉為最新版本，並產生比對報告寄送給相關人員。
- 自動生成比對報告，可得知有一行程式有差異並立即執行災難回復。

Compare Report

Tasks

Tasks

備份檔案

線上檔案

Task

Left Content

Right Content

ms0016p10

Scheduled Programs

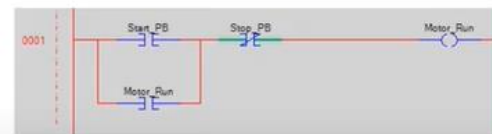
FTAC_PRG

該行程式有差異

Compare Report

Main

Program: Others
Routine: Main

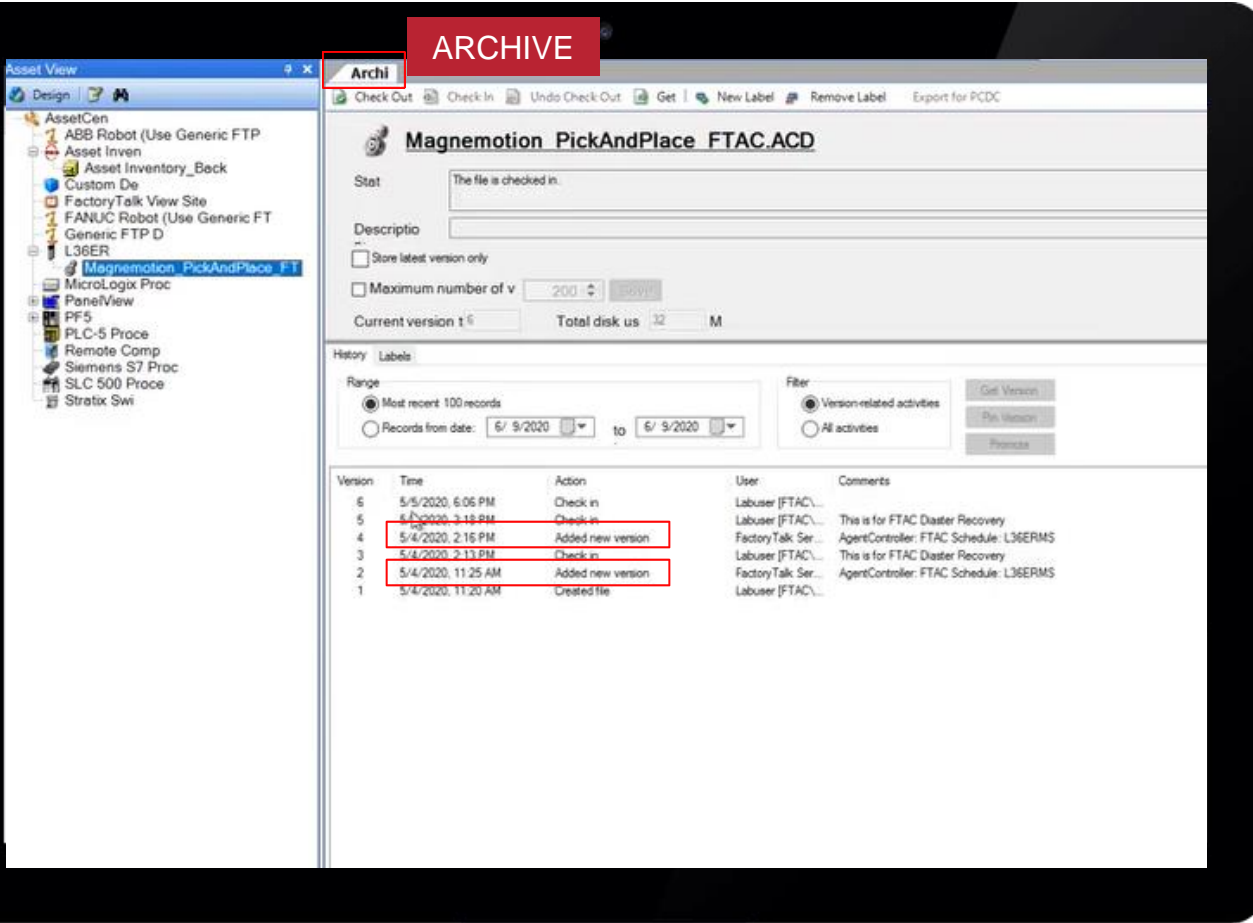


LIFECYCLE MANAGEMENT – 生命週期管理

- 定期更新Rockwell自動化產品的生命週期。
- 掃描並比對線上所有的自動化相關設備是否有變更。

Active	Most current offering within a product category.
Active Mature	Product is fully supported, but a newer product or family exists. Gain value by migrating.
End of Life	Discontinued date announced - actively execute migrations and last time buys. Product generally orderable until the discontinued date.
Discontinued	New product no longer manufactured or procured. Repair/exchange services may be available.

CHANGE AND VERSION MANAGEMENT – 變更和版本管理



- 集中管理自動化設備的版次變更。
- 進入ARCHIVE, 即可發現在05/04當天有改變2次控制器的版次。使用者可針對這兩種版次做比較, 選擇最適合廠區的版次。

OPERATOR TRACK AND TRACE – 操作員追蹤紀錄

- 紀錄自動化設備的相關操作，並提供未來稽核之用 – “誰”於“什麼時間”在“哪台電腦”做了“什麼操作”。
- 點選📎符號，可進一步觀察Attachment資料。
- 同時將操作過程透過郵件✉發送給相關人員。

WHEN **WHO** **WHERE** **WHY**

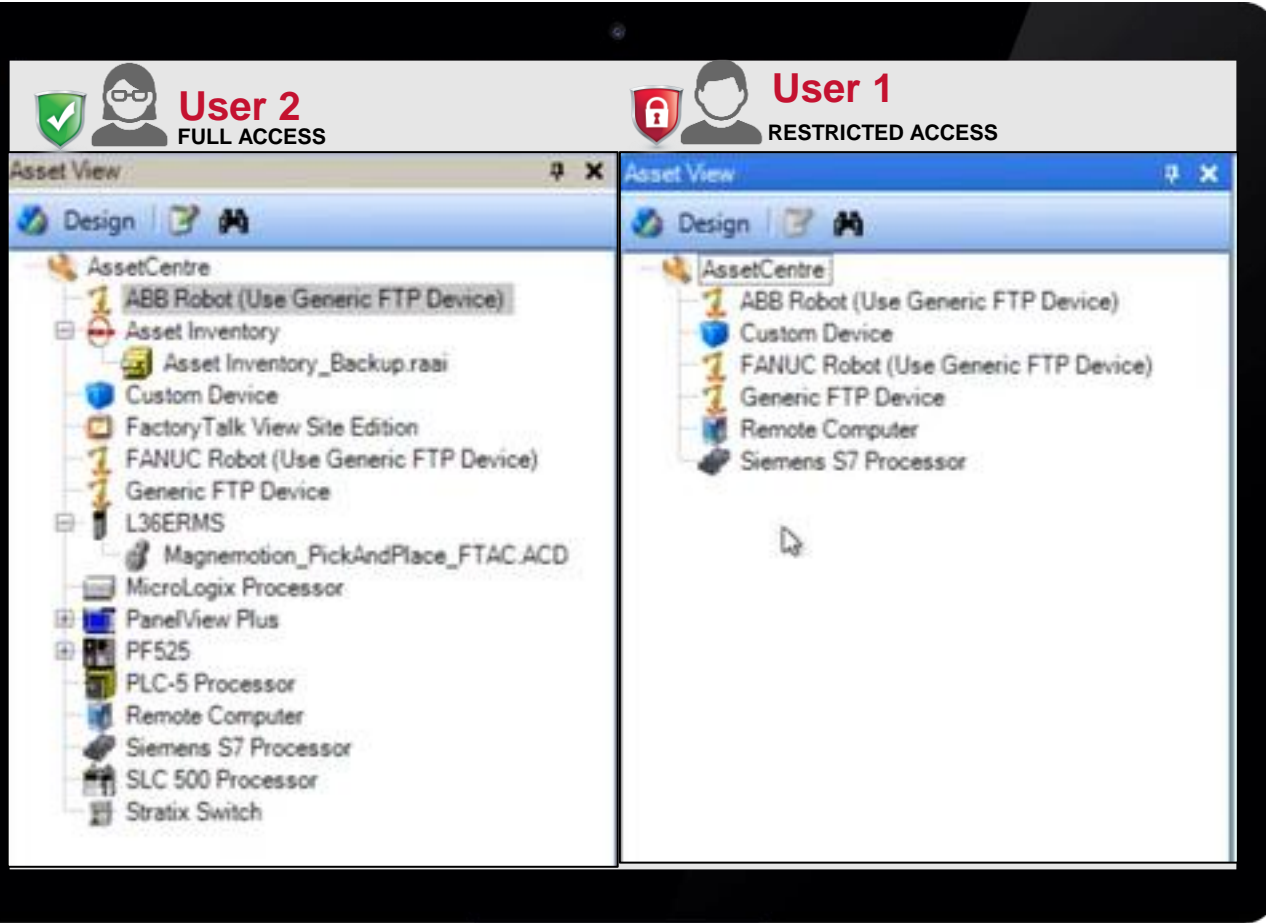
Logged Time	Occurred Time	Source	Location	Severity	Message
6/9/2020 4:32:23	6/9/2020 4:32:22 P	RA Disaster Reco	FTAC	Information	Scheduled event started 2020-06-09 16:32:22 (Local) - 2020-06-09 08:32:22 (UTC)
6/9/2020 4:32:23	6/9/2020 4:32:13 P	FactoryTalk Asset	FTAC	Information	L36ERMS - AssetCentre Start Schedule
6/9/2020 11:46:2	6/9/2020 11:46:17	FactoryTalk Asset	DESKTOP-60CK	Information	Refresh lifecycle information on the AssetCentre client with the AssetCentre server completes succes
6/9/2020 11:46:2	6/9/2020 11:46:17	FactoryTalk Asset	DESKTOP-60CK	Information	Refresh lifecycle information on the AssetCentre client with the AssetCentre server starts at: 6/9/2
6/9/2020 11:46:1	6/9/2020 11:46:09	FactoryTalk Asset	FTAC	Information	L36ERMS - AssetCentre End of Schedule
6/9/2020 11:46:1	6/9/2020 11:46:07	RA Disaster Reco	FTAC	Warning	Scheduled event finished 2020-06-09 11:46:07 (Local) - 2020-06-09 03:46:07 (UTC)
6/9/2020 11:43:3	6/9/2020 11:43:28	RA Disaster Reco	FTAC	Information	Scheduled event started 2020-06-09 11:43:28 (Local) - 2020-06-09 03:43:28 (UTC)
6/9/2020 11:43:2	6/9/2020 11:43:19	FactoryTalk Asset	FTAC	Information	L36ERMS - AssetCentre Start Schedule
6/9/2020 11:40:4	6/9/2020 11:40:37	FactoryTalk Asset	FTAC	Information	L36ERMS - AssetCentre End of Schedule
6/9/2020 11:40:3	6/9/2020 11:40:35	RA Disaster Reco	FTAC	Warning	Scheduled event finished 2020-06-09 11:40:35 (Local) - 2020-06-09 03:40:35 (UTC)
6/9/2020 11:37:5	6/9/2020 11:37:49	RA Disaster Reco	FTAC	Information	Scheduled event started 2020-06-09 11:37:49 (Local) - 2020-06-09 03:37:49 (UTC)
6/9/2020 11:37:4	6/9/2020 11:37:39	FactoryTalk Asset	FTAC	Information	L36ERMS - AssetCentre Start Schedule
6/2/2020 2:07:06	6/2/2020 2:07:03 P	FactoryTalk Activ	TM	Information	Checked out a FactoryTalk: activation RSVSECLI.R/W serial 3135 from Local Host
6/2/2020 2:07:06	6/2/2020 2:07:03 P	FactoryTalk Activ	TM	Information	transaction = checkout
5/21/2020 10:49:	5/21/2020 10:49:2	FactoryTalk Activ	TM	Information	Checked out a FactoryTalk: activation RSSK_700.exe serial 3135 from Local Host
5/21/2020 10:49:	5/21/2020 10:49:2	FactoryTalk Activ	TM	Information	transaction = checkout
5/21/2020 9:26:4	5/21/2020 9:26:35	FactoryTalk Asset	FTAC	Information	L36ERMS - AssetCentre End of Schedule
5/21/2020 9:26:4	5/21/2020 9:26:32	RA Disaster Reco	FTAC	Warning	Scheduled event finished 2020-05-21 21:26:32 (Local) - 2020-05-21 13:26:32 (UTC)

Log Item Details:

WHAT

Logged at: 6/9/2020 4:32:23 PM Location: FTAC
Occurred at: 6/9/2020 4:32:22 PM Severity: Information
Source: RA Disaster Recovery Agent
Attachments: 0
Message: Scheduled event started 2020-06-09 16:32:22 (Local) - 2020-06-09 08:32:22 (UTC)
Event: Backup and Compare
Schedule: L36ERMS
Task Id: 8D0F9E0B-7766-4E75-A3BB-F8CD80B45457
Name: L36ERMS (Allen-Bradley Control Logix)
Network Route: FTACJAB_ETHIP-1172.16.17.42
Hardware Details: 1769-L36ERMS LOGIX5370 SAFETY

SYSTEM SECURITY – 系統安全



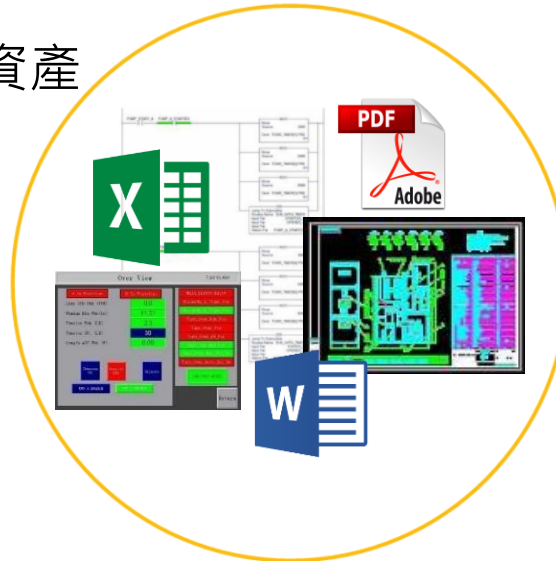
- 防止不同人員登入, 看到不同的資產設備。
- 防止未授權人員進行更改或版次變更等操作。
- 設定權限後, 不同權限所能看到的資產設備將會不同, 如User1與User2。

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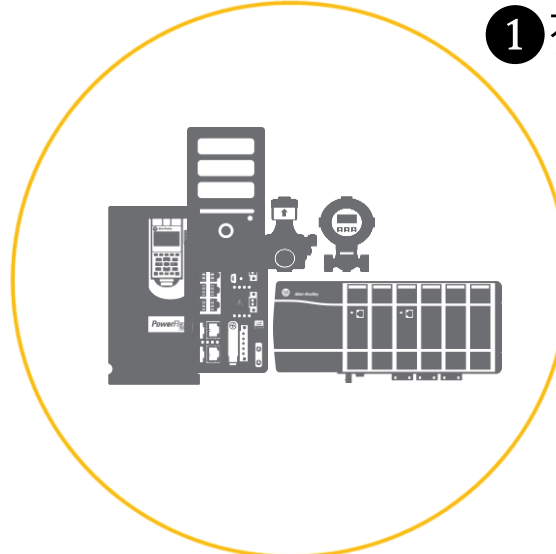
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FactoryTalk® AssetCentre

如何有效地管理廠區內的資產：

- 進行全系統控制器程式及變頻器參數檔案管理。
- 中央控管不同版本之程式及各式各樣的檔案。
- 自動備份自動化資產之內容。
- 進行自動化資產之程式, 新舊版本的比較。
- 進行全廠災難回復, 讓自動化設備程式及配置回復到正常的初始狀態或是特定版本。



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Allen-Bradley

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LIFECYCLE IQ™
Services

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FactoryTalk

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