

# Université **IBM i**

## 19 et 20 novembre 2024

IBM Innovation Studio Paris

### **S39 – Démonstration PowerSC – MFA et anti-virus**

20 novembre 11:30 - 12:30

**Mathieu Ferre**

IBM France

*mathieu.ferre@ibm.com*



uui2024

#ibmi

#uui2024

The classic IBM logo, consisting of the letters 'IBM' in a bold, sans-serif font with horizontal stripes.The logo for 'Common France', featuring the word 'common' in a stylized, lowercase font with a decorative underline, and the word 'FRANCE' in a smaller, uppercase font below it.

# Qu'est que Power**SC** 2.2

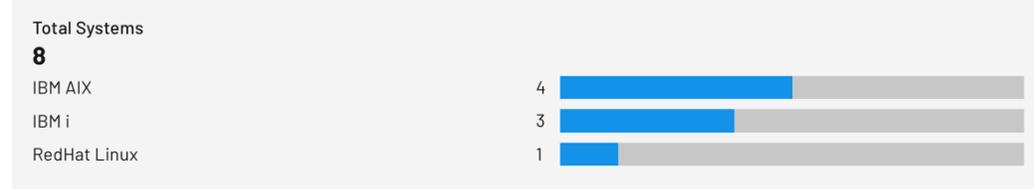


La version 2.2 de PowerSC est supportée sur Linux on Intel

**IBM PowerSC 2.2** gère la  
Sécurité et la Conformité des  
environnements AIX, IBM i,  
ou Linux qui tournent sur les  
serveurs IBM Power.



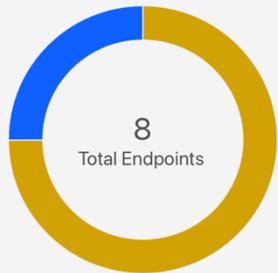
## Endpoint Info



## Compliance Status

Compliance Overview For Selected Group

All Systems



- Not Applied
- Compliant
- Disconnected
- Non-compliant

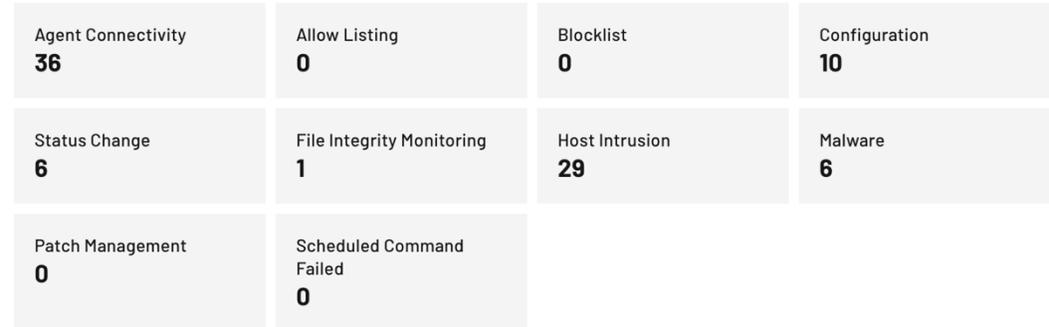
[Apply](#) [Check](#)

## Groups With Compliance Failures

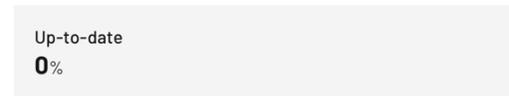
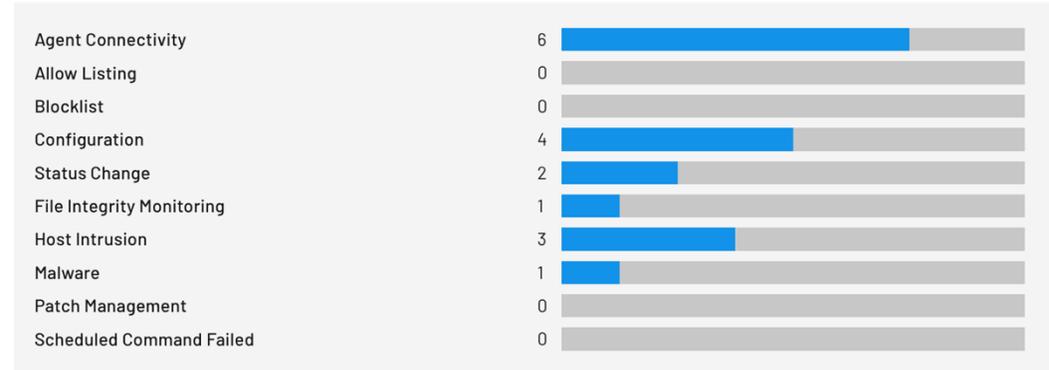
Group Name	Failures
No systems have been added	

## Real Time Security

### Total Events



### Endpoints with events



# PowerSC : Sécurité et Conformité des entreprises



**Sécurité**



**Gestion des mises à jour**

**PowerSC**

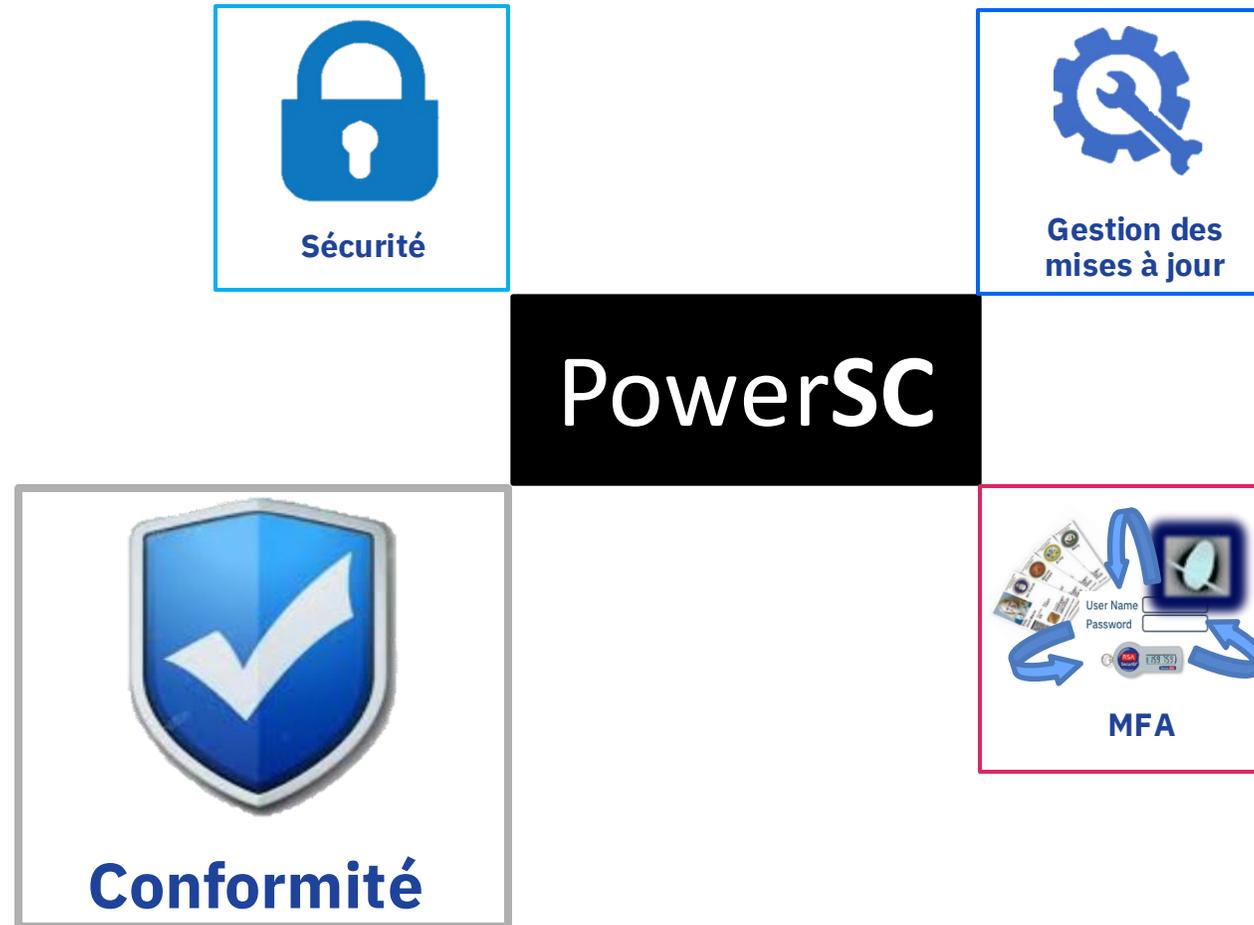


**Conformité**



**MFA**  
Authentication Multifacteurs

# PowerSC : Sécurité et Conformité des entreprises





## Conformité

- Régularisation automatique de conformité (PCI, GDPR, HIPAA, etc)
- Rapports préconçus, Timeline pour soutenir supporter les audits de sécurité et de conformité
- Interface graphique centralisant la gestion de tous les systèmes à partir d'une seule interface

# PowerSC 2.2 Conformité



Onglet de Conformité      Opérations de Conformité      Opérations de Conformité

System Name	OS	Last Applied Type	Apply Timestamp	Check Timestamp	Check Passed	Check Failed	Check Status
<input type="checkbox"/> mfeaixpcdem.showbc.ibm.com	AIX IBM AIX	N/A	-	-	-	-	-
<input type="checkbox"/> MFEIBMIPSCDEM01	IBMi IBM i	IBMi_best_practices_Custom	6/3/2024, 6:39:34 PM	-	1	0	Passed
<input type="checkbox"/> MFEIBMIPSCST01	IBMi IBM i	IBMi_best_practices_Custom	2/7/2024, 10:40:49 AM	-	0	1	Failed
<input checked="" type="checkbox"/> mfepcmfasrv.showbc.ibm.com	AIX IBM AIX	N/A	-	-	-	-	-

**Simulated CISv1\_Custom**

Failed Rules:

- 6/3/2024, 11:52:50 PM cisv1\_minlen:  
The attribute minlen for user root should have value 8, but it is 10.  
The attribute minlen for user daemon should have value 8, but it is 10.  
The attribute minlen for user bin should have value 8, but it is 10.  
The attribute minlen for user sys should have value 8, but it is 10.  
The attribute minlen for user adm should have value 8, but it is 10.  
The attribute minlen for user uucp should have value 8, but it is 10.  
The attribute minlen for user guest should have value 8, but it is 10.  
The attribute minlen for user nobody should have value 8, but it is 10.  
The attribute minlen for user lpd should have value 8, but it is 10.  
The attribute minlen for user lp should have value 8, but it is 10.  
The attribute minlen for user sshd should have value 8, but it is 10.  
The attribute minlen for user invscout should have value 8, but it is 10.  
The attribute minlen for user snapp should have value 8, but it is 10.  
The attribute minlen for user ipsec should have value 8, but it is 10.  
The attribute minlen for user sures should have value 8, but it is 10.

Résumé de la Conformité

Endpoints

Résultat de la Conformité par règle

## Profils De Conformité

### Profils AIX

- GDPR, PCI, CIS, HIPAA, NERC, DoD STIG, SAP Hardening, Oracle Systems Hardening

### Profils Linux

- GDPR, PCI, SAP Hardening, CIS, DoD, HMC Hardening (2024)

### Profils IBM I

- IBM i best practices, CIS



# PowerSC 2.2 Conformité – Rapports



Onglet rapports

IBM PowerSC Home Compliance Security Reports Profile Editor mferre Administrator

Reports <<

### Compliance Overview for all systems

6/3/2024, 11:27:33 PM Hide Summary

**System Passes and Failures**

100% 3 Passes 0 Failures 0%

Total Rules Checked **5** Specific Rules Failed **0**

Connectivity Status: All Compliance Status: All Export to pdf

System Name	Last Applied Type	Apply Timestamp	Check Timestamp	Check Passed	Check Failed	Simulate Failed
mfeaixpsdem.showbc.ibm.com	N/A	-	-	-	-	2
MFEIBMIPSCDEM01	IBMi_best_practices_Custom	6/3/2024, 6:39:34 PM	-	1	0	-
MFEIBMIPSCST01	IBMi_best_practices_Custom	2/7/2024, 10:40:49 AM	-	0	1	-
mfepcmfasrv.showbc.ibm.com	N/A	-	-	-	-	-
mferhelpscdem.showbc.ibm.com	N/A	-	-	-	-	-
mfetncsrv.showbc.ibm.com	N/A	-	-	-	-	-
ppsibmimerlin.showbc.ibm.com	IBMi_best_practices_Custom	5/13/2024, 5:14:02 PM	-	-	-	1

Rapports de Conformité

Choisir un groupe

Résultat de la Conformité (par endpoint)

# PowerSC 2.2 Conformité – Reports



Onglet rapports

Rapports de conformité

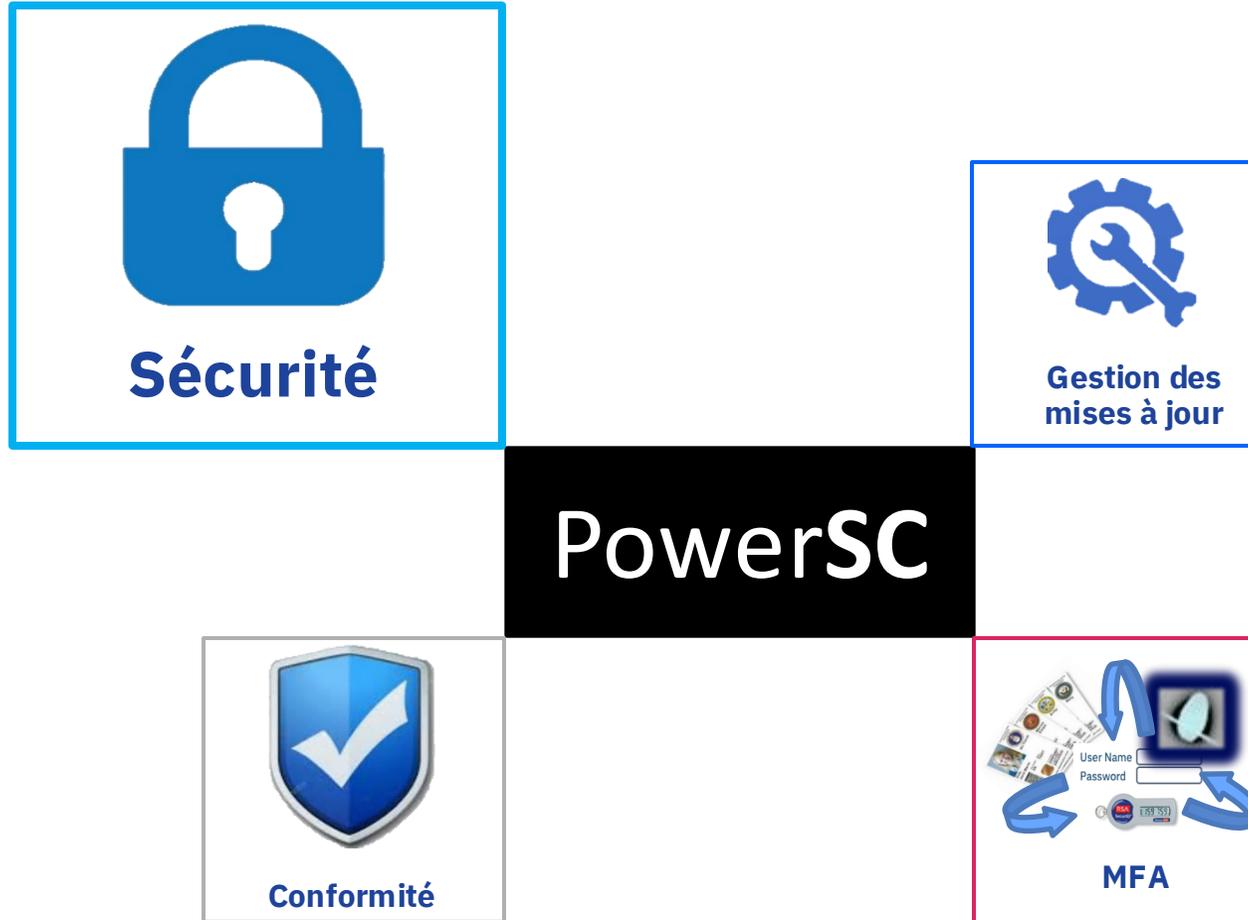
Choisir un groupe

The screenshot displays the IBM PowerSC Reports interface. The top navigation bar includes Home, Compliance, Security, Reports, and Profile Editor. The Reports section is active, showing a sidebar with options like Compliance Overview, Compliance Detail, File Integrity Overview, File Integrity Detail, Combined Compliance and FIM, Timeline, Event Analysis, and Malware Details. The main content area is titled 'Compliance Detail for all systems' and shows a summary of system passes and failures (100% passes, 0% failures) and total rules checked (5). Below this is a table of system compliance status and a detailed view of failed simulated rules for the system mfeaixpscdem.showbc.ibm.com.

System Name	Last Applied Type	Apply Timestamp	Check Passed	Check Failed	Simulate Failed
mfeaixpscdem.showbc.ibm.com	N/A	-	-	-	2
MFEIBMIPSCDEM01	IBMi_best_practices_Custom	6/3/2024, 6:39:34 PM	1	0	-
MFEIBMIPSCST01	IBMi_best_practices_Custom	2/7/2024, 10:40:49 AM	0	1	-
mfepcmfasmv.showbc.ibm.com	N/A	-	-	-	-

Résultat de la Conformité détaillé (par endpoint)

# PowerSC: Sécurité et Conformité des entreprises





**Security**



Surveillance d'intégrité de fichier (FIM - File Integrity Monitoring)	Conformité en temps réel (RTC – Real Time Compliance)	Surveillance d'intégrité de fichier (FIM - File Integrity Monitoring)
	Trusted Execution (TE)	File Access Policy Daemon (fapolicyd)
Système de détection d'intrusion (IDS - Intrusion Detection System)	Système de détection d'intrusion (IDS - Intrusion Detection System)	Système de détection d'intrusion (IDS - Intrusion Detection System)
Trusted Firewall (TF)	Trusted Firewall (TF)	Trusted Firewall (TF)
	Trusted Boot (TB)	
	Trusted Logging (TL)	

# PowerSC 2.2 Sécurité

- **FIM:** File Integrity Monitoring
- **RTC:** Real-Time Compliance (AIX)
- **IDS:** Intrusion Detection System (Port Scan on Linux, Password Failures, Agent Connectivity...)
- **TE:** Trusted Execution
- **TB:** Trusted Boot
- **TF:** Trusted Firewall
- **TL:** Trusted Logging
- **fapolicyd:** File Access Policy Daemon

Onglet Sécurité

Résumé des évènements de Sécurité

Endpoints

The screenshot displays the 'Security' tab in the IBM PowerSC interface. It shows a summary of endpoints with events, including Agent Connectivity, Blocklist, Status Change, Host Intrusion, and Scheduled Command Failed. A table lists systems with their OS and various security features like FIM, Allow List, IDS, Alerts, and Actions. A list of recent events is also visible at the bottom.

System Name	OS	FIM	Allow List	IDS	Alerts	Actions
mfeaixpscdem.showbc.ibm.com	AIX IBM AIX	1	X	X 19	0 34	
MFEIBMIPSCDEM01	IBM i	X	X		0 1	
MFEIBMIPSCST01	IBM i	X	X		0 1	
mfeipcmfarsv.showbc.ibm.com	AIX IBM AIX	✓	X	X 7	0 30	

Etat de fonctionnement de la fonctionnalité

Nombre d'évènements

Evènements FIM (RTC/auditd/IBM i audit)

Evènements d'intrusion

TE/fapolicyd

The Settings page shows various security features that can be enabled or disabled. The 'Sub-product usage' section includes FIM, Allow List, Patch, IDS, Alerts, TB, TF, and TL. Each feature has a toggle switch and a brief description.

Sélectionner les fonctionner à observer sur l'interface graphique



# PowerSC 2.2 Sécurité – Rapports



Résumé des événements de sécurité par type sur l'ensemble des endpoints

Onglet rapports

IBM PowerSC Home Compliance Security **Reports** Profile Editor

Reports <<

File Integrity Overview for all systems  
6/4/2024, 12:01:33 AM Hide Summary

**Endpoints with events**

Agent Connectivity	7	Allow Listing	0
Blocklist	0	Configuration	3
Status Change	2	File Integrity Monitoring	1
Host Intrusion	3	Malware	0
Patch Management	0	Scheduled Command Failed	0

**Total Events**

Agent Connectivity	Allow Listing	Blocklist	Configuration	Status Change	File Integrity Monitoring	Host Intrusion	Malware	Patch Management	Scheduled Command Failed
105	0	0	12	49	1	99	0	0	0

**System Name**      **FIM**      **Allow List**      **Patch**      **IDS**

mfeaixpscdem.showbc.ibm.com	🛡️ 1	×	—	×
MFEIBMIPSCDEM01	×	×	×	🛡️
MFEIBMIPSCST01	×	×	×	🛡️
mfepcmfasrv.showbc.ibm.com	✓	×	—	×
mferhelpscdem.showbc.ibm.com	✓	×	×	×
mfetncsrv.showbc.ibm.com	🛡️	×	—	×
ppsibmimerlin.showbc.ibm.com	×	×	×	🛡️

Rapport de sécurité

Choisir un groupe

Résumé des événements de sécurité par type et par endpoint

# PowerSC 2.2 Sécurité – Rapports



Résumé des événements de sécurité par type sur l'ensemble des endpoints

Onglet Rapports

IBM PowerSC Home Compliance Security **Reports** Profile Editor mferre Administrator

Reports <<

File Integrity Detail for all systems  
6/4/2024, 12:04:03 AM Hide Summary

**Endpoints with events**

Agent Connectivity	7	Allow Listing	0
Blocklist	0	Configuration	3
Status Change	2	File Integrity Monitoring	1
Host Intrusion	3	Malware	0
Patch Management	0	Scheduled Command Failed	0

**Total Events**

Agent Connectivity	Allow Listing	Blocklist	Configuration	Status Change	File Integrity Monitoring	Host Intrusion	Malware	Patch Management	Scheduled Command Failed
105	0	0	12	49	1	99	0	0	0

System Name	FIM	Allow List	Patch	IDS
> mfeaixpcdem.showbc.ibm.com	⊗ 1	×	—	⊗ 19
> MFEIBMIPSCDEM01	×	×	×	⊗
> MFEIBMIPSCST01	×	×	×	⊗
∨ mfepcmfarv.showbc.ibm.com	✓	×	—	⊗ 7

**File Integrity Events**

1 RTC Switched ON

6/3/2024, 11:46:32 PM

Feature Name	RTC
--------------	-----

Rapports de Sécurité

Choisir un groupe

Événements de sécurité détaillés par type et par endpoint

# PowerSC 2.2 Autres rapports



Onglet rapports

The screenshot shows the IBM PowerSC interface. The top navigation bar includes 'Home', 'Compliance', 'Security', 'Reports', and 'Profile Editor'. The 'Reports' tab is active. On the left, a sidebar menu lists various report types: Compliance Overview, Compliance Detail, File Integrity Overview, File Integrity Detail, Combined Compliance and FIM, Timeline (selected), Event Analysis, and Malware Details. The main content area displays a 'Timeline for mfepcmfasrv.showbc.ibm.com AIX'. It features a filter menu with 'Month', 'Day', 'Hour', and 'Events in list' (selected). The timeline shows a list of events from 4/2/2024 to 6/3/2024. A date range selector at the top right shows 'From: 03/14/2024' and 'To: Now'.

Date	Time	Event
6/3/2024	11:47:41 PM	A GUI user "mferre" has submitted a change for RTC
6/3/2024	11:46:32 PM	RTC was switched on
6/3/2024	11:46:31 PM	A GUI user "mferre" has submitted a change for RTC
6/3/2024	11:29:38 PM	A GUI user "<uiAgent>" has submitted a change for RTC
6/3/2024	11:16:57 PM	Agent Disconnected
6/3/2024	10:32:54 PM	Agent Connected
4/2/2024	6:46:48 PM	Agent Connected
4/2/2024	6:46:17 PM	Agent Disconnected

Choisir un endpoint

Timeline

Tous les évènements de Conformité et de Sécurité (pour 1 endpoint)

# PowerSC 2.2 Autres rapports



Onglet rapports

The screenshot shows the IBM PowerSC interface. The top navigation bar includes Home, Compliance, Security, Reports (selected), and Profile Editor. The user is identified as mferre, Administrator. The left sidebar lists various report categories, with 'Event Analysis' for 'mfepcmfasrv.showbc.ibm.com' selected. The main content area displays 'Event Analysis for mfepcmfasrv.showbc.ibm.com' with filters for Urgency (0 Critical, 0 Warning, 9 Low), Event category (All categories), Show (Active alerts only), and Timestamp (From 05/03/2024 to 06/03/2024). A table shows 9 total alerts. The table has columns for Urgency, Event Category, Event Type, and Timestamp. The first three alerts are 'Compliance Rule Failure' (Low urgency) and the fourth is 'Check' (Low urgency). Below the table, a detailed view for the event at 6/3/2024, 11:52:50 PM shows details: Operation (checkByProfile), Compliance Level (CISv1\_Custom), Compliance Status (Failed), Number Passed (0), and Number Failed (2). The fifth alert is 'Configuration' (Low urgency) with the message 'A GUI user "mferre" has submitted a change for RTC' at 6/3/2024, 11:47:41 PM.

<input type="checkbox"/>	Urgency	Event Category	Event Type	Timestamp
> <input type="checkbox"/>	Low	Compliance	Compliance Rule Failure	6/3/2024, 11:52:50 PM
> <input type="checkbox"/>	Low	Compliance	Compliance Rule Failure	6/3/2024, 11:52:50 PM
∨ <input type="checkbox"/>	Low	Compliance	Check	6/3/2024, 11:52:50 PM
<b>6/3/2024, 11:52:50 PM</b>				
	Operation	checkByProfile		
	Compliance Level	CISv1_Custom		
	Compliance Status	Failed		
	Number Passed	0		
	Number Failed	2		
> <input type="checkbox"/>	Low	Configuration	A GUI user "mferre" has submitted a change for RTC	6/3/2024, 11:47:41 PM

Choisir un endpoint

Analyse d'évènements

Tous les évènements de Conformité et de Sécurité (pour 1 endpoint)

# PowerSC: Sécurité et Conformité des entreprises





Onglet sécurité

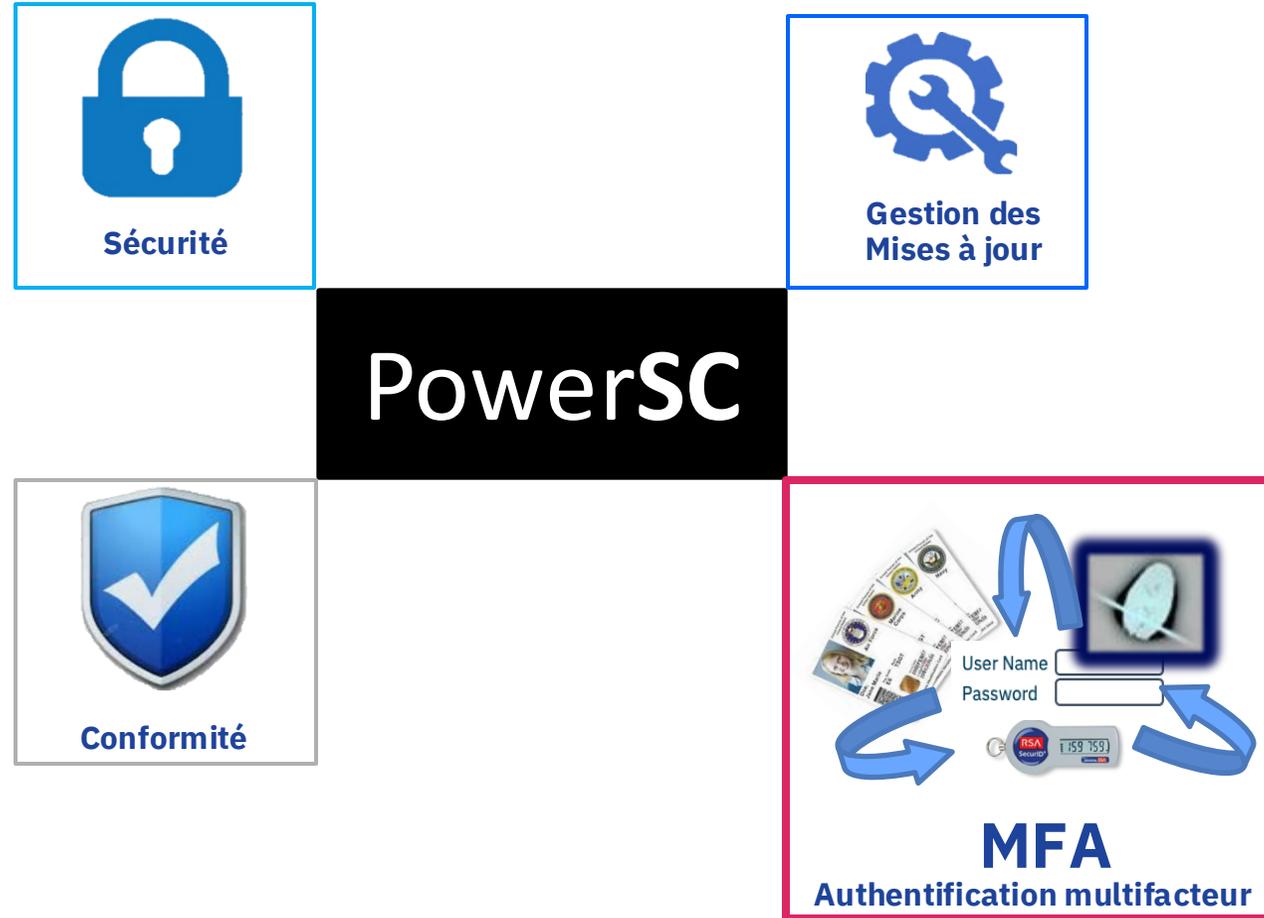
The screenshot displays the IBM PowerSC Security interface. The top navigation bar includes 'Home', 'Compliance', 'Security', 'Reports', and 'Profile Editor'. The user is logged in as 'mferre Administrator'. The main view shows 'All Systems' with 7 systems. A 'Groups' sidebar on the left lists 'AIX', 'IBM i', and 'Linux'. The 'Endpoints with events' section shows a bar chart for various categories: Agent Connectivity (7), Blocklist (0), Status Change (2), Host Intrusion (3), Patch Management (0), Allow Listing (0), Configuration (3), File Integrity Monitoring (1), Malware (0), and Scheduled Command Failed (0). The 'Total Events' section shows counts for Agent Connectivity (105), Allow Listing (0), Blocklist (0), Configuration (12), Status Change (49), File Integrity Monitoring (1), Host Intrusion (99), Malware (0), Patch Management (0), and Scheduled Command Failed (0). Below this is a table of systems with columns for System Name, OS, FIM, Allow List, Patch, IDS, Alerts, and Actions. The table lists four systems: mfeaixpscdem.showbc.ibm.com (AIX), MFEIBMIPSCDEM01 (IBM i), MFEIBMIPSCST01 (IBM i), and mfepcmfasrv.showbc.ibm.com (AIX). The 'Events' section at the bottom shows two event types: Configuration : RTC Configuration Change Request Warning (8) and Agent Connectivity : Agent Disconnected (8).

Statut du niveau de mise à jour

- ## Gestion de Mises à jour
- **IBM i** : visibilité sur le niveau d'OS
  - **Linux** (RHEL/SLES) : Mise à jour et verification du niveau des librairies de l'OS
  - **AIX** : intègre le Trusted Network Connect (TNC) – permet de créer des règles de mises à jour, vérifie la conformité des endpoints aux règles créées et permet de mettre à jour (selon une règle / un niveau d'OS : TL/SP fixé)



# PowerSC: Sécurité et Conformité des entreprises





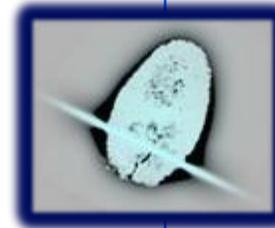
## Facteurs d'Authentification

- Ce que l'on connaît
  - Mot de passe / code PIN
- Ce que l'on a
  - Badge / clé cryptographique
- Ce que l'on est
  - Empreinte digitales / données biométriques

Login

User Name

Password



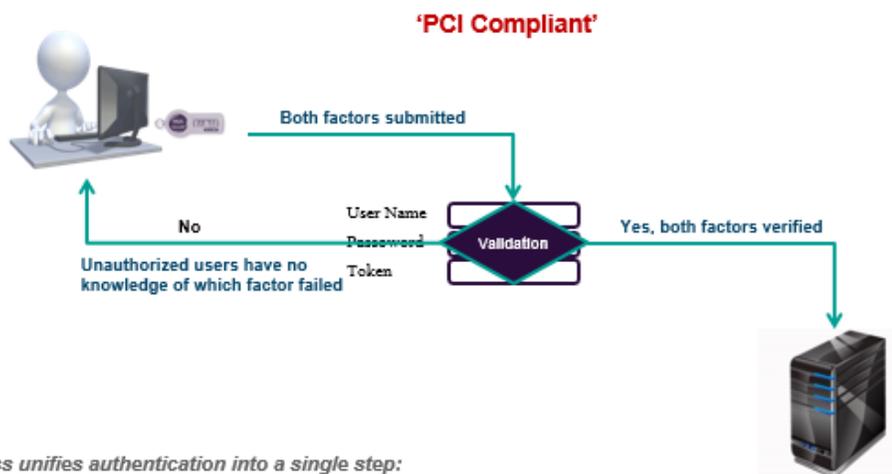
**Au moins deux** facteurs d'authentification à utiliser pour confirmer des **évidences d'identité différentes** pour avoir accès à un système.

## Authentication Multifacteur

- Méthode de contrôle d'accès à une session utilisateur en s'authentifiant au travers la **preuve d'identité par plusieurs évidences simultanées**

## Authentication Deux-facteur (2FA)

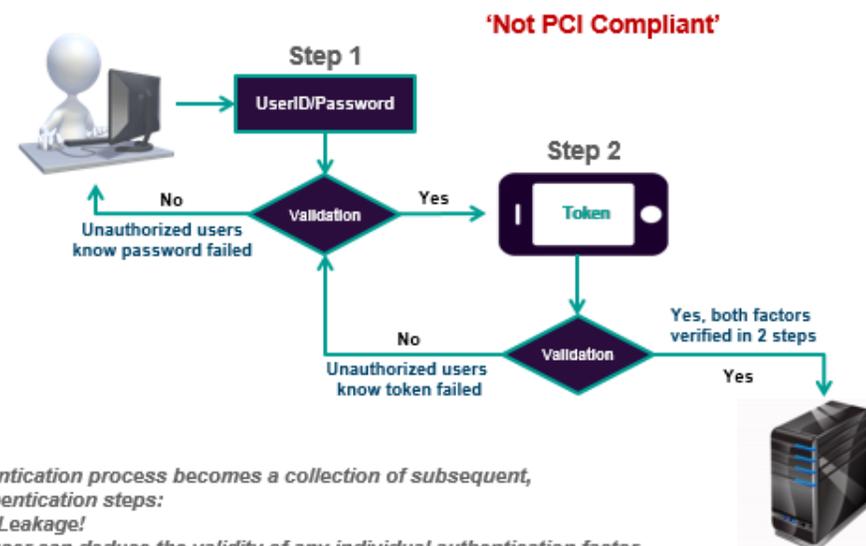
- Méthode d'authentification utilisant une combinaison de **deux différentes preuves d'identités simultanées**



The overall process unifies authentication into a single step:  
All factors verified prior to the authentication mechanism granting the requested access.  
> No Data Leakage!  
No prior knowledge of the success or failure of any single factor provided.

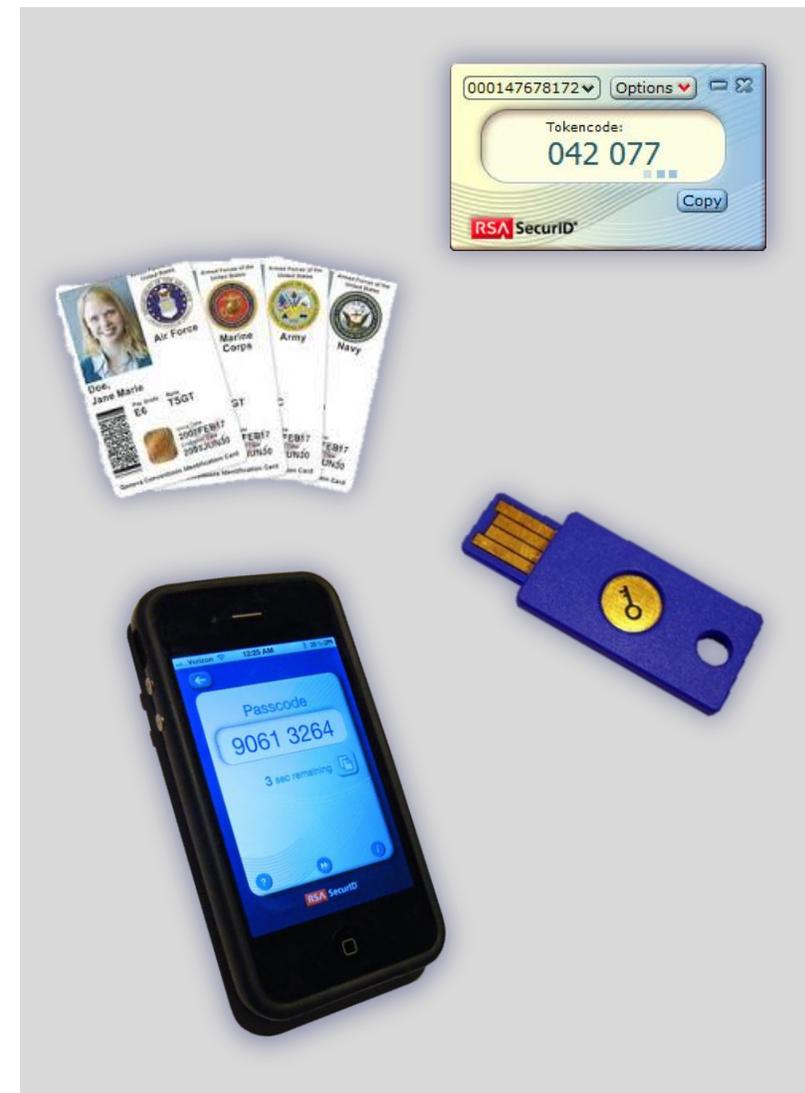
## Authentication Multi-Etapes

- **Collection de facteurs d'authentification mono facteurs différentes, étape par étape**, l'accès à la méthode d'authentification suivante (ou à la session) ne se fait que si la (les) précédente(s) méthodes ont réussies



The overall authentication process becomes a collection of subsequent, single-factor authentication steps:  
> Potential Data Leakage!  
Unauthorized user can deduce the validity of any individual authentication factor

- RSA SecurID (via fob)
- PIN-protected certificates on PIV/CAC smart cards
- TOTP (IBM / Google Verify)
- Yubikey (via USB on laptop e.g.)
- Radius Protocol (Generic, Gemalto Safenet, RSA)
- Password / LDAP





- Administration centralisée de différents facteurs pour différentes populations d'utilisateurs
- Construction de règles d'authentications à partir de plusieurs méthodes d'authentification supportées
- ➔ *'Créez votre propre combinaison multifacteur'*
  - Combinez une authentification multifacteurs comme : "smart card + pin", avec une autre méthode d'authentification comme RSA or Yubikey ou encore juste un mot de passe
- Simplifiez l'authentification MFA
  - PowerSC MFA permet l'utilisation d'un token dérivé (CTC – Cache Token Credential) qui peut être utilisé à la place d'un mot de passe, et s'obtient à partir d'une authentification MFA



- Spécification des ports du serveur PowerSC MFA GUI, niveau de traçabilité...

Server Options

Base Security IBM i SSO

Initial trace level (0-3)  
2

Prefer client-side CTC display  Off

Enable certificate services  Off

Enable TOTP services  On

Enable Yubico enrollment services  Off

Enable CTC Broadcaster services  Off

Enable JWT CTC services  Off

Enable Strict PCI mode  Off

PKCS#11 Token Name \*

Server Options

Base Security IBM i SSO

SSL trace level (0-3)  
0

Trust Store Path

PKCS#12 Server Identity Path \*  
/etc/security/pmfa/certificates/test-server.pfx

PKCS#12 Server Identity Passphrase

Server Auth Port \*  
6793

Mutual Auth Port \*  
6794

- Activer / désactiver des facteurs

- ....

# PowerSC MFA – Interface d'Administrative GUI: Configuration des facteurs



- Configuration des méthodes d'authentification :
  - Time-based One Time Password (token temporel à usage unique) – configuration du nombre de chiffre pour le token, durée de vie du token, algorithme d'encryption...

User Provisioning Policy Definitions Authentication Methods IBM i Servers

Methods

Name
PIV/CAC or X.509 Certificate
IBM Security Verify Access
LDAP Simple Bind
PAM Authentication
Generic RADIUS
Thales SafeNet RADIUS
RSA SecurID
RSA SecurID Authentication API
RSA SecurID RADIUS
Time-based One Time Password (TOTP)

Method Details

Time-based One Time Password (TOTP)

Consecutive Failures Before TOTP Suspension \*

3

Trace Level

2 - +

Web Services Trace Level

0 - +

Realm Name \*

mfaboiko

Digest Algorithm

SHA256

Token Digits \*

8

Save

- IBM Security Verify Access: niveau de traçabilité, chemins vers les Certificats d'Authentification, ID du client...

• ....

IBM PowerSC MFA English Settings Logou

User Provisioning Policy Definitions Authentication Methods IBM i Servers

Methods

Name
PIV/CAC or X.509 Certificate
IBM Security Verify Access
LDAP Simple Bind
PAM Authentication
Generic RADIUS
Thales SafeNet RADIUS
RSA SecurID
RSA SecurID Authentication API

Method Details

IBM Security Verify Access

Trace Level

0 - +

Trusted CAs Path \*

Client ID \*

Client Secret \*

Authentication Context \*

Save



# PowerSC MFA – Interface d'Administration : Configuration des règles



- Administration des règles : observer le contenu d'une règle, la supprimer, en créer une nouvelle

IBM PowerSC MFA

English Settings Logout

User Provisioning Policy Definitions Authentication Methods IBM i Servers

Policies + Add policy

Name	Description	CTC Timeout (sec)	CTC Reusable
TOTPANDPASSWD	TOTP and Password to log	180	true
TOTRONLY	Only TOTP	30	false

TOTPANDPASSWD

Policy Details Methods

Policy Description

TOTP and Password to log

Save

- Création d'une règle : choisir une ou plusieurs méthodes et configurer les paramètres par défaut des méthodes d'authentification

Create a New Policy

Details Methods

Policy Name\*

Description\*

CTC Timeout\*

CTC Reusable  Off

Cancel Back Next

Create a New Policy

Details Methods

Name

PIV/CAC or X.509 Certificate

IBM Security Verify Access

LDAP Simple Bind

PAM Authentication

Generic RADIUS

Thales SafeNet RADIUS

RSA SecurID

RSA SecurID Authentication API

RSA SecurID RADIUS

Time-based One Time Password (TOTP)

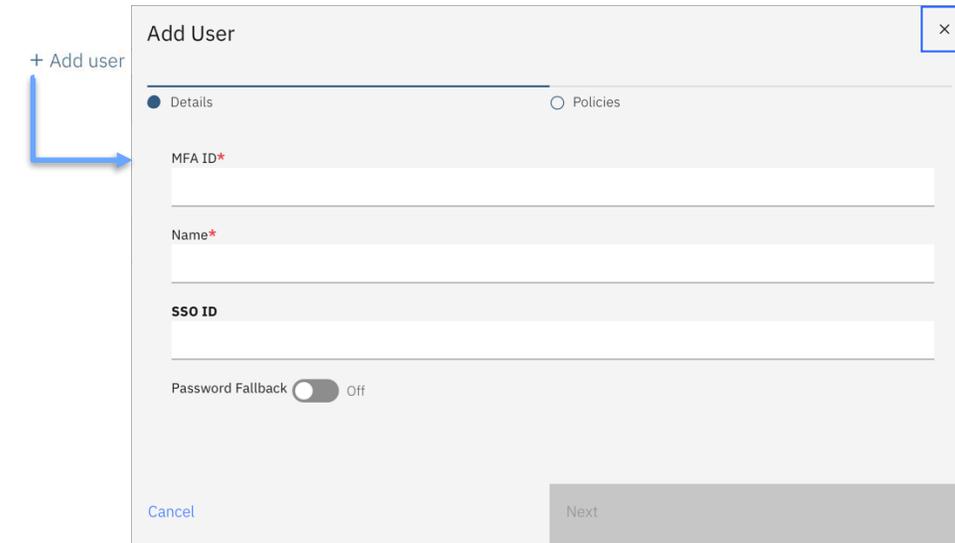
Yubico OTP

Cancel Back Add Policy

# PowerSC MFA – Interface d'Administration : Provisionnement d'utilisateurs



- Provisionnement d'utilisateurs depuis l'interface graphique



- Provisionnement par script

```
powerscmfa : /home/mferre # pmfauseringest user_list
powerscmfa : /home/mferre # sh pmfaprov1.sh
Tag Name = REGSTATE, Tag Value = OPEN
powerscmfa : /home/mferre # sh pmfaprov2.sh
Existing AZFTOTP1 tag data for user mferre:
REGSTATE: OPEN
KEYLABEL:
ALG:
NUMDIGITS: 0
PERIOD: 0
WINDOW: 0
TZERO: 0
CVALUE: 0
AZFTOTP1 tag data for user mferre after applying system defaults:
REGSTATE: OPEN
KEYLABEL:
ALG: SHA256
NUMDIGITS: 8
PERIOD: 30
WINDOW: 1
TZERO: 0
CVALUE: 0
Pending AZFTOTP1 tag data for user mferre:
REGSTATE: OPEN
KEYLABEL:
ALG: SHA256
NUMDIGITS: 8
PERIOD: 30
WINDOW: 1
TZERO: 0
CVALUE: 0
Committed AZFTOTP1 factor data for mferre.
Existing AZFTOTP1 tag data for user thuche:
```



# PowerSC MFA – Interface d'Administration : Partitions IBMi



- Ajouter une partition IBM i comme client MFA :
  - Assigner un ID utilisateur de la partition IBM i à un ID utilisateur de la partition PowerSC MFA Server

**IBM PowerSC MFA**

User Provisioning   Policy Definitions   Authentication Methods   **IBM i Servers**

IBM i Servers

Search servers

**+ Add server**

Server Details

Add a new IBM i server

Define S...    Select...    Input IBM i Pr...

**Host Name\***

IBMi\_Server

**Description**

Cancel   Back   Next

Add a new IBM i server

Define Server    Select user    Input IBM i Pr...

MFA ID	Name
<input checked="" type="radio"/> aapmfa	PMFA
<input type="radio"/>	

Cancel   Back   Next

Add a new IBM i server

Define Server    Select user    Input IBM i Profiles

Associate User Profiles + Add

USERA

Cancel   Back   Add

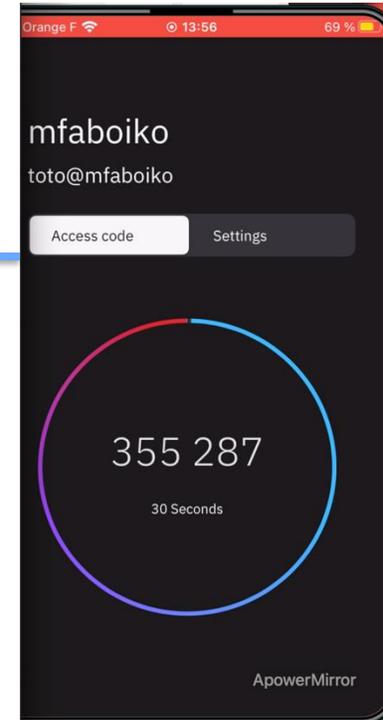


# PowerSC MFA – Authentication d'un utilisateur



- Authentication "In-Band": à partir d'un terminal – Entrer le nom de la règle et répondre aux méthodes d'authentification spécifiées

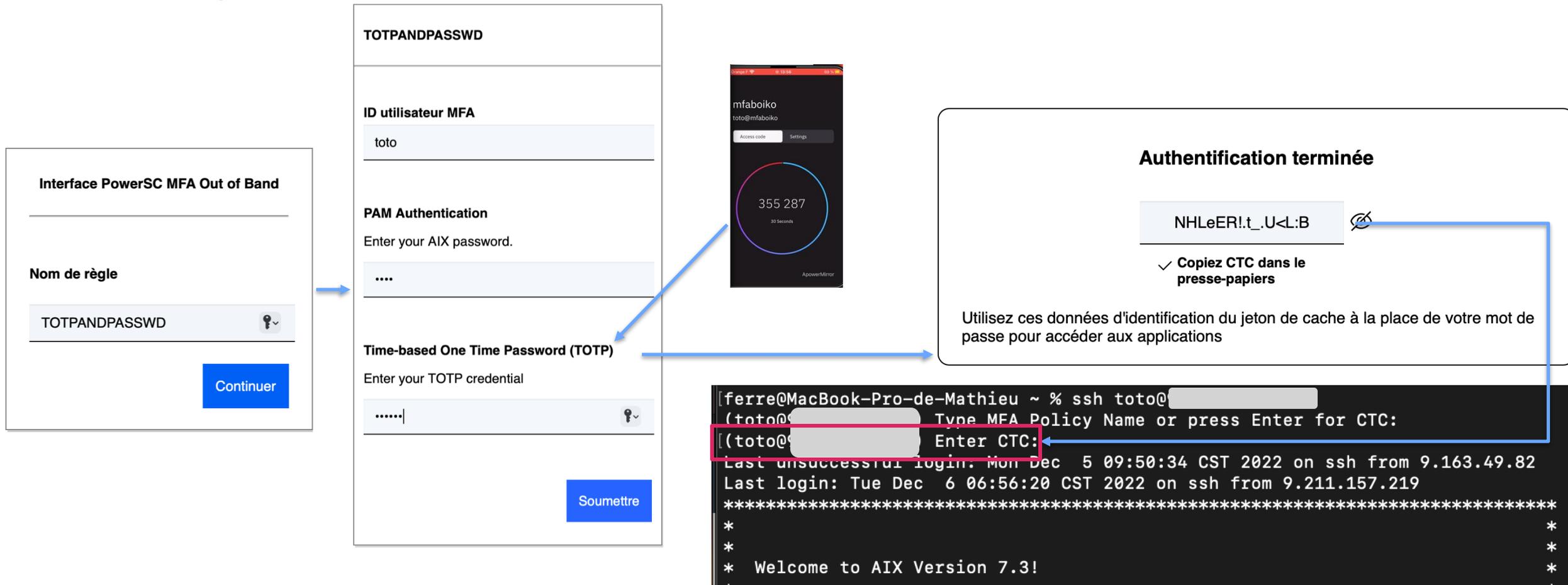
```
ferre@MacBook-Pro-de-Mathieu ~ % ssh toto@  
(toto@ Type MFA Policy Name or press Enter for CTC: TOTPANDPASSWD  
(toto@ Enter your AIX password.:  
(toto@ Enter your TOTP credential: ←  
Last unsuccessful login: Mon Dec 5 09:50:34 CST 2022 on ssh from  
Last login: Tue Dec 6 05:05:20 CST 2022 on ssh from  
*****  
* * * * *  
* Welcome to AIX Version 7.3! * * * * *  
* * * * *  
* Please see the README file in /usr/lpp/bos for information pertinent to * * * * *  
* this release of the AIX Operating System. * * * * *  
* * * * *  
* * * * *  
*****  
$
```



# PowerSC MFA – Authentification d'un utilisateur



- Authentification “Out-of-Band” : A partir de l’interface graphique PowerSC MFA – Entrer le nom d’un règle (ou directement une URL pour cette règle), répondre aux méthodes d’authentification de la règle pour récupérer le token dérivé (CTC). Entrez le CTC dans le terminal.



# PowerSC: Enterprise Security and Compliance



**Sécurité**

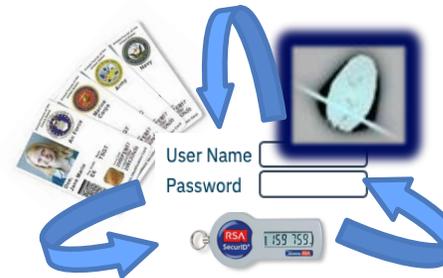


**Gestion des  
Mises à jour**

**PowerSC**



**Conformité**



**MFA**  
Authentication Multifacteur

# PowerSC 2.2 – Les prérequis par composant et par OS



Prérequis (Component\OS)	AIX	Linux	IBM i
<b>PowerSC GUI Server</b>	AIX 7.1, ou après	Linux sur Power et Linux sur Intel: <ul style="list-style-type: none"> <li>• RHEL 8.x, ou après</li> <li>• SLES 15 SP4, ou après</li> </ul>	COMING SOON (12/12/2024)
<b>PowerSC GUI Agent</b>	AIX 7200-04, AIX 7200-05 et AIX 7.3 Niveau minimum requis pour AIX 7.1 : 7100-05-05	Linux sur Power et Linux sur Intel: <ul style="list-style-type: none"> <li>• RHEL 8.x, ou après</li> <li>• SLES 15 SP4, ou après</li> </ul>	IBM i v7R2M0, ou après
<b>PowerSC MFA GUI Server</b>	AIX 7.2 TL3, ou après AIX 7.3	Linux sur Power : <ul style="list-style-type: none"> <li>• RHEL 8.1, ou après (RHEL 9.x non supporté)</li> <li>• SLES 15, ou après</li> </ul>	Sur IBM PASE for i IBM i v7r3, ou après
<b>PowerSC MFA PAM Clients</b>	AIX 7.2 TL3, ou après VIOS v2.2.5.20, ou après	Linux sur Power : <ul style="list-style-type: none"> <li>• RHEL 8.1, ou après</li> <li>• SLES 15</li> </ul>	IBM i v7R2

# PowerSC Téléchargez la version d'essai



- PowerSC 2.2 Essai de 90 jours
  - <https://epwt-www.mybluemix.net/software/support/trial/cst/welcomepage.wss?siteId=1287&tabId=3451&w=1>
- Le téléchargement requiert l'acceptation d'accord de licences
- Format de licence Try/Buy, permet une transition de la version d'essai à la version définitive production sans effet de transition

## PowerSC 2.2 Trial

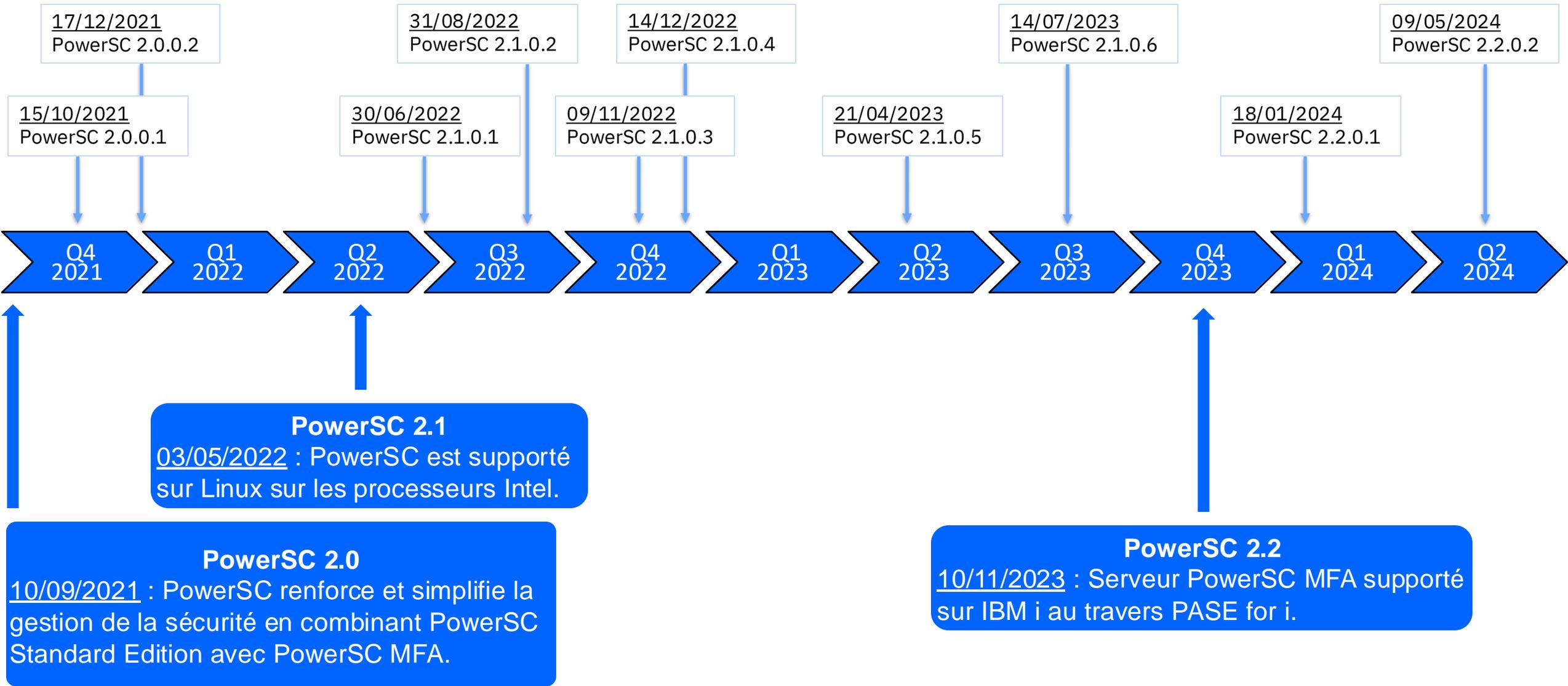
### IBM PowerSC™ 2.2 Trial

Welcome! Thank you for your interest in the IBM PowerSC™ 2.2 Trial! During the 90 day trial period you will have access to this great product which simplifies the management of security for virtualized environments on Power System™ servers running AIX, Linux, and IBM i. During the trial period you will have the opportunity to use the production version of the product and evaluate if it delivers the necessary business value. You are encouraged to engage with your sales account manager to get answers to any questions you have. We also would encourage you to discuss your organizations' needs and challenges throughout this engagement to help shape our future product offerings.

### Action Required:

This is a no cost program. To participate in the IBM PowerSC 2.2 Trial, please click on the 'Continue to Agreement' button below and accept the trial agreement which covers the terms that govern the trial.

# PowerSC Annonces récentes



# Merci pour votre attention

Mathieu Ferre  
Junior Partner Technical Specialist  
[mathieu.ferre@ibm.com](mailto:mathieu.ferre@ibm.com)