

A promotional banner for the Common Europe Congress 2026. The background is a blue gradient with a large, stylized French flag (red, white, and blue) flowing across it. On the right, there is a photograph of a man in a gold suit standing on a hill overlooking the city of Lyon, France, with the Centre de Congrès de Lyon visible in the background. The text is white and red on a dark blue background.

 In association with
Common France

COMMON EUROPE CONGRESS 2026

14 - 17 June
Lyon, France

The largest conference in Europe
for solutions around IBM Power (IBM I, AIX, Linux) & IBM Storage

 www.comeur.org 

LYON EVENTS | CENTRE DE CONGRÈS
DE LYON

**Welcome to Lyon, France
and the 2026 Common Europe Congress**

**Bienvenue à Lyon, en France,
et au Congrès de Common Europe 2026**

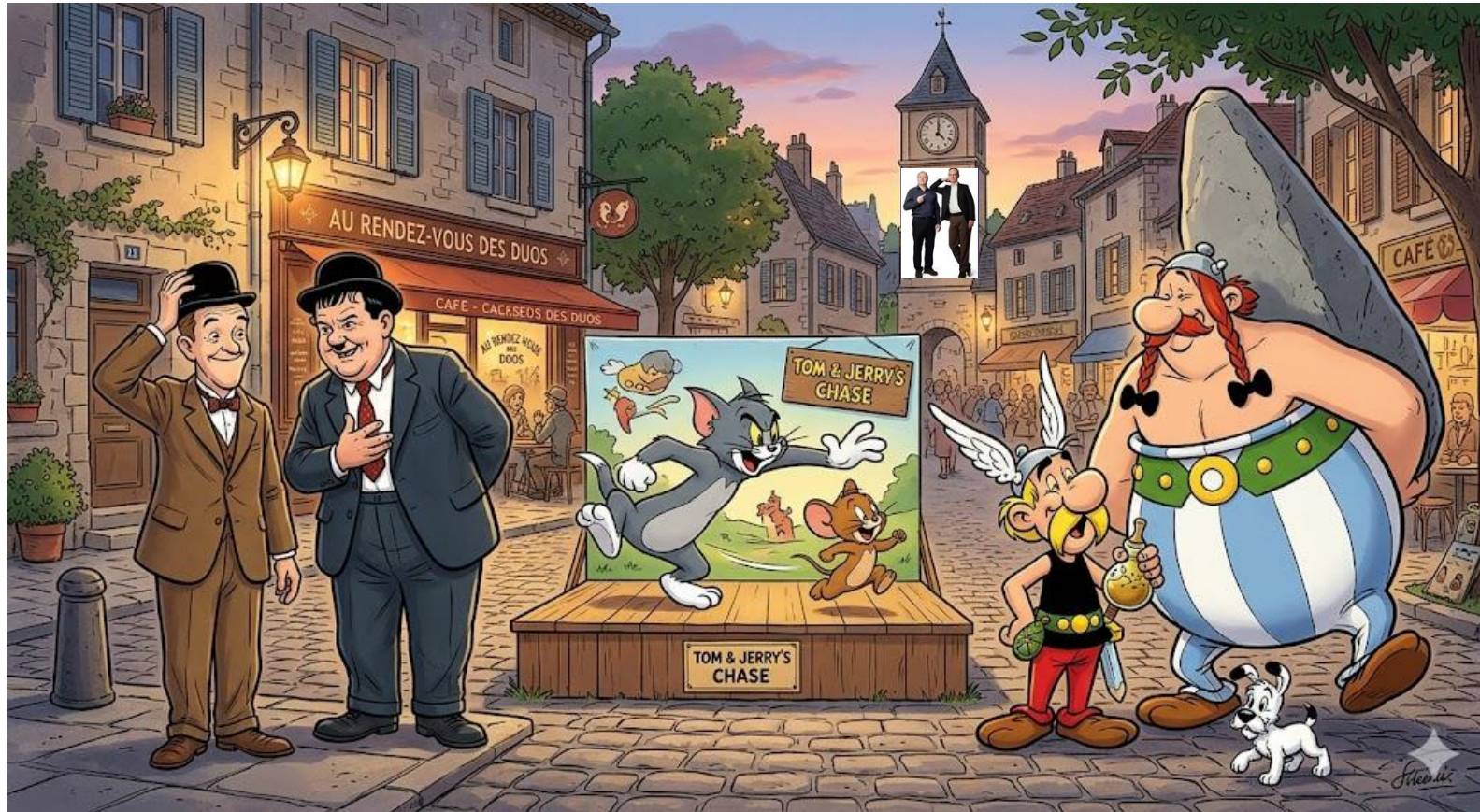
Unlocking the Potential of IBM's Administration Runtime Expert



IBM I ENVIRONMENTS



FAMOUS DOUBLE-ACTS



INTRODUCTIONS

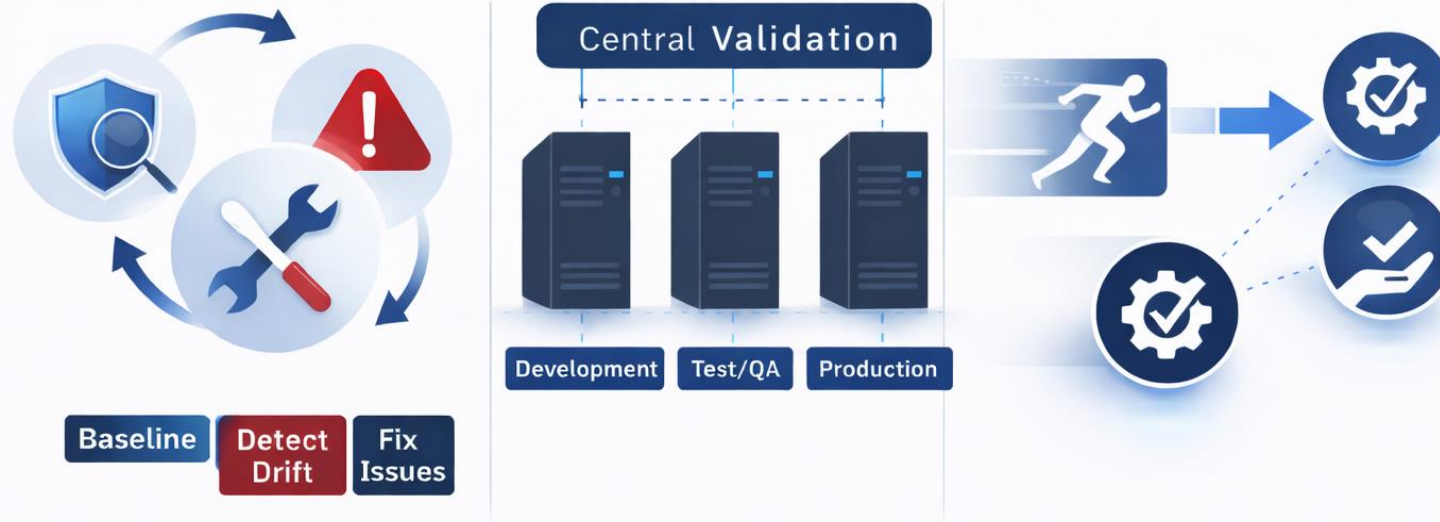


Rudi Van Helvoirt
Lead IBM i Specialist
Softwarebevers



Ash Giddings
Product Manager,
Maxava

SESSION GOAL

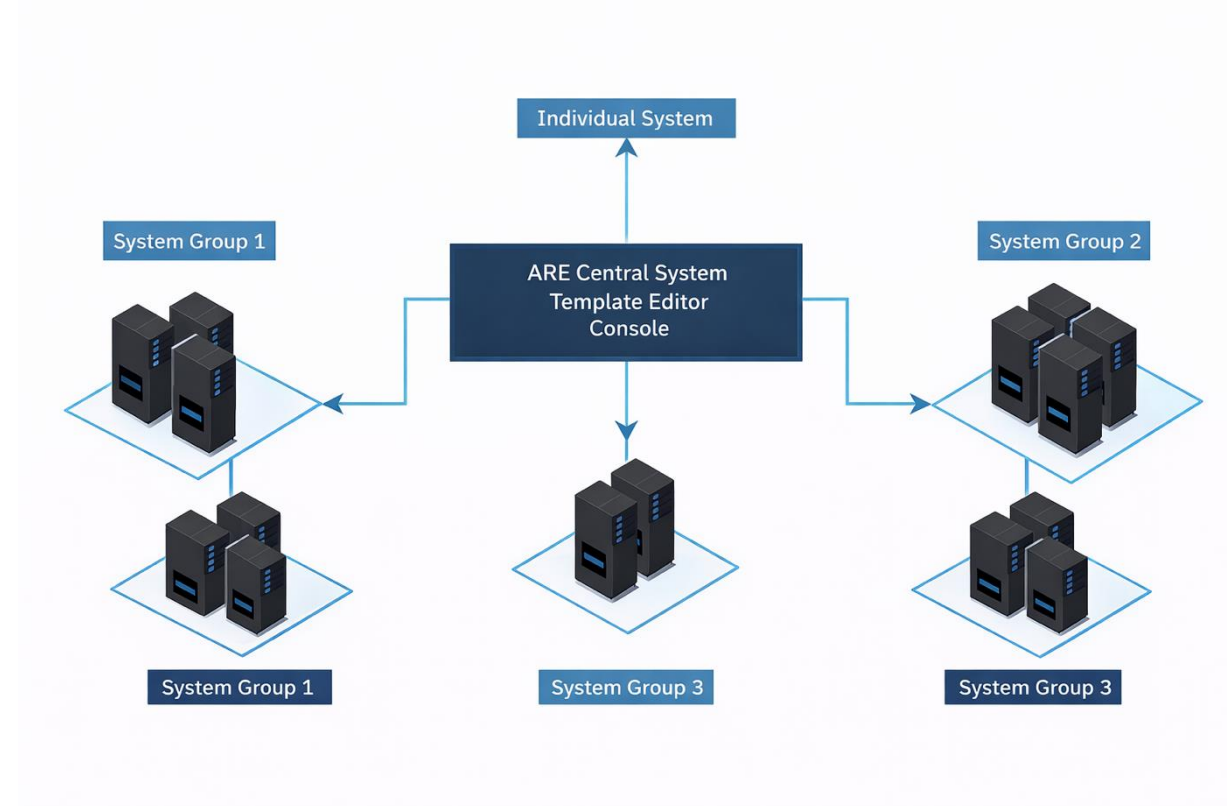


WHAT IS ARE?

- Administration Runtime Expert is an IBM product that can ensure that your system looks the way it should, and stay that way
- Automates configuration checks, detecting risks early, and ensuring consistent, compliant system environments
- ARE provides:
 - An easy-to-use GUI to define the attributes you want to verify
 - A console to set up groups of systems to run verifications on
 - A reporting interface to review results
- ARE is not Application Runtime Expert, this is an old name
- It's free!!!

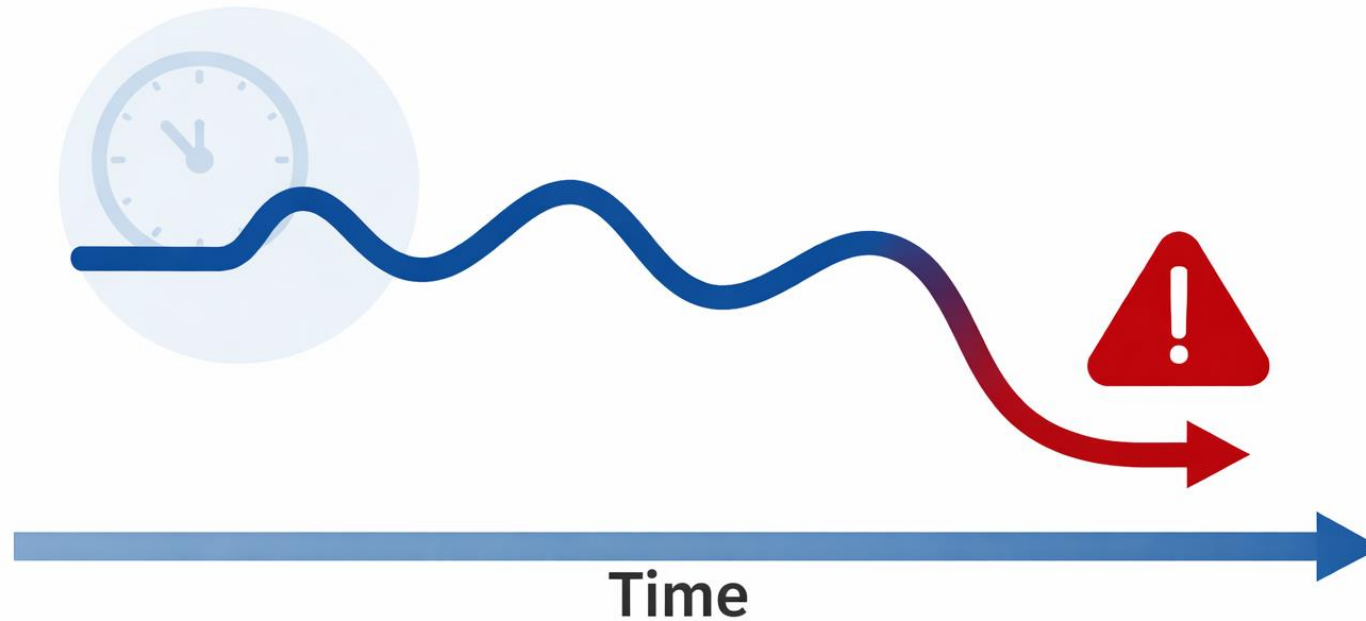
WHAT IS ARE?

- ARE allows you to
 - Define a template
 - Compare a system(s) against that template
 - Identify differences
 - Optionally apply changes to align systems
- ARE is split into 3 capabilities
 - Capture
 - Compare
 - Enforce



IBM I ENVIRONMENTS

Long-Lived, Evolving Over Time
Resulting in Drift



WHY ARE MATTERS NOW



Growing complexity of IBM i estates

Expanding environments, integrations and custom solutions increase complexity and the chance of error.



Skills shortages and operational dependency on tribal knowledge

Limited IBM i expertise and reliance on key individuals create operational risk and knowledge gaps.



Configuration drift and its impact on HA/DR readiness

Uncontrolled changes lead to inconsistencies that undermine high availability and disaster recovery readiness.



Compliance and audit pressure

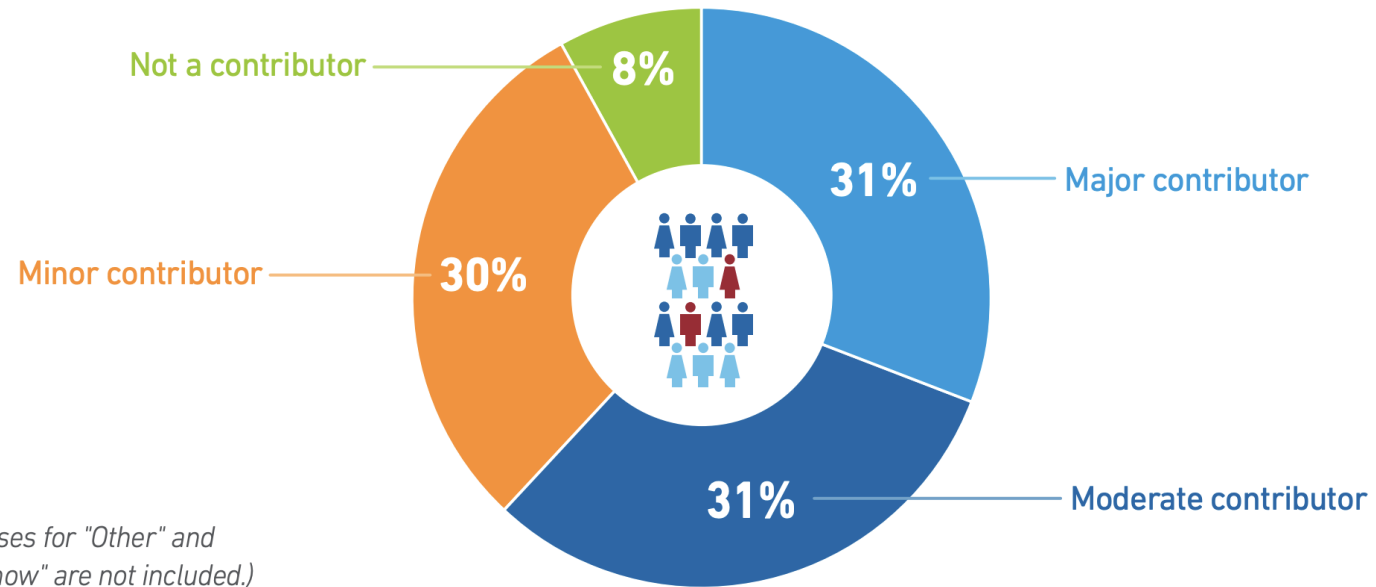
Increasing regulatory requirements demand greater visibility, documentation and audit readiness.



Downtime risk caused by undocumented system changes

Undocumented or ad-hoc changes can cause failures, outages and business disruption.

OUTAGES AND HUMAN ERROR



(Responses for "Other" and "Don't know" are not included.)

UPTIME INSTITUTE DATA CENTER RESILIENCY SURVEY 2026

uptime
INTELLIGENCE

DO YOU KNOW YOUR ENVIRONMENT?

HOW DO YOU KNOW WHAT YOU DON'T KNOW?



You can't protect what you can't see.
Visibility is the first step to certainty.

COLLECTION CAPABILITIES

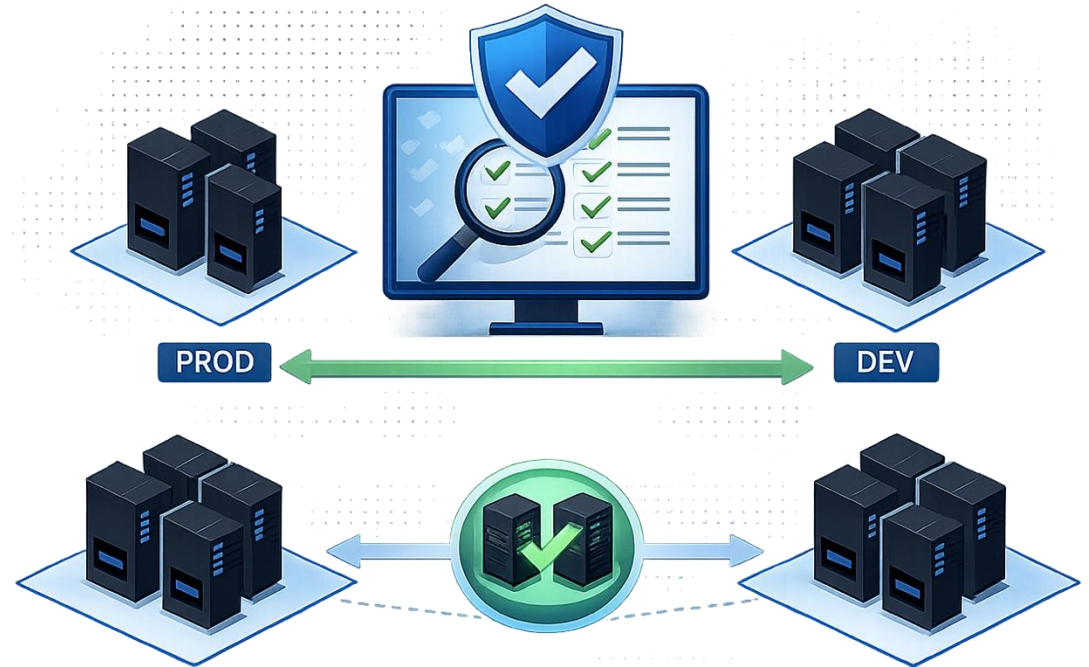
What you can collect

The IBM Administration Runtime Expert for i has a wide array of application attributes and settings it can collect, along with many of the system settings and values most critical to your applications. Here are some of the possible attributes and values that it can collect:

- File/directory/library authorities
 - Owner
 - Authorization list
 - Primary group
 - Object authorities
 - Data authorities
- File/directory/library attributes
 - Creation date
 - Last modified date
 - File size
 - File type
 - CCSID
 - IBM i object native attributes
- Attributes within property/http/XML configuration files
- User IDs
- Product PTFs & PTF Groups
- System Values & Network Attributes
- Product installation status
- Internet Protocol network verification and configuration
- Environment variables
- Ports in use
- CL and Qshell command output
- SQL statement output
- Log files

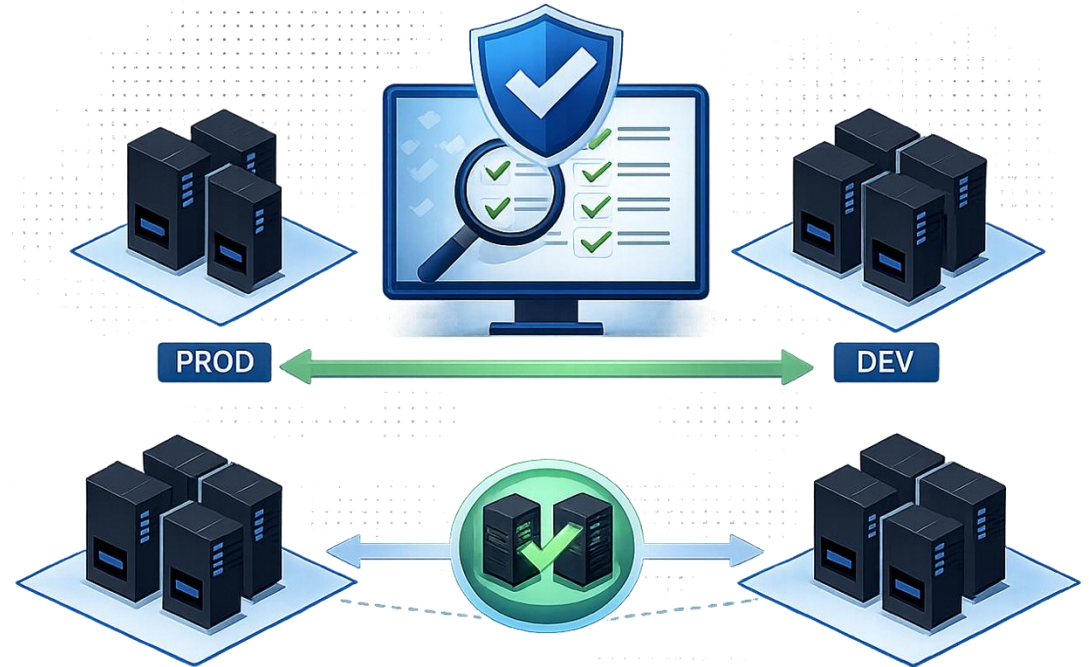
EXAMPLE USE CASES

- Aligning PROD/DEV/TEST
- Verifying post-upgrade settings
- Checking HA/DR nodes match



EXAMPLE USE CASES

- Anything you can access with an SQL SELECT statement
- Anything you can access with a CL or a QShell command
- Anything you want with custom plugins



HOW TO GET ARE

- The runtime engine (core) that is part of the operating system with no additional installation requirements
- Central and Endpoint Servers require:
 - 5770SS1 option 3 - Extended Base Directory Support
 - 5770SS1 option 12 - Host Servers
 - 5770SS1 option 30 - QShell
 - 5770SS1 option 33 - PASE
 - 5770JV1 option 17, 19, or 20 - Java
- Central system also requires 5770DG1 - IBM HTTP Server for i

HOW TO GET ARE

- The 5733-ARE product is required for the web-based user interface is available via ESS





The screenshot shows the IBM Entitled Systems Support interface. On the left is a navigation sidebar with sections like 'Entitled Systems Support', 'My Entitled Software', and 'Software Downloads'. The main area contains a table of products. The first row is highlighted with a red border.

Platform	Product ID	Product Name	Entitled Systems Support	electronic Proof of Entitlement	IBM i	No
Power	5733-ARE	IBM Application Runtime Expert i	Entitled Systems Support	electronic Proof of Entitlement	IBM i	No
Power	5733-B45	IBM AFP Font Collection for i	Entitled Systems Support	electronic Proof of Entitlement	IBM i	No
Power	5733-CO2	IBM Connect for iSeries Version 2.0	-	No software download on ESS	-	No
Power	5733-CY1	Cryptographic Device Manager	-	No software download on ESS	-	No
Power	5733-CY2	IBM System i Cryptographic Device Manager for V6R1	-	No software download on ESS	-	No
Power	5733-CY3	IBM Cryptographic Device Manager for i	Entitled Systems Support	electronic Proof of Entitlement	IBM i	No
Power	5733-DIR	IBM Director with Virtualization Engine Console	-	No software download on ESS	-	No
Power	5733-DR1	IBM Director with Virtualization Engine Console for i5/OS	Entitled Systems Support	electronic Proof of Entitlement	IBM i	No
Power	5733-EWA	IBM Virtualization Engine Enterprise Workload Manager for i5/OS	-	No software download on ESS	-	No
Power	5733-EWM	IBM Virtualization Engine Enterprise Workload Manager	-	No software download on ESS	-	No
Power	5733-FXD	IBM Intergrated Domino Fax for iSeries	Entitled Systems Support	electronic Proof of Entitlement	IBM i	No
Power	5733-GT1	IBM Grid Toolbox V3 for OS/400	-	No software download on ESS	-	No
Power	5733-			No software		

AUTHORITY

- Old ARE UI needs *ALLOBJ
- New ARE AI – managed by two authorization lists to use ARE in Navigator for i without *ALLOBJ
 - QNAVARECON for the Console
 - QNAVARETMP for Templates

PARTITION TO PARTITION COMMS

Port	Service	Required For	Recommendation
449	Secure DRDA (SSL)	Encrypted SQL communications	 Recommended
8473/9473	Database Server	JT400 / JDBC database access	 Commonly Required
8475/9475	Remote Command Server	CommandCall and ProgramCall execution	 Required if running CL commands remotely
8476/9476	Sign-on Server	Authentication services for Toolbox connections	 Commonly Required

HOW TO KEEP ARE UP TO DATE

- You must also keep current on ARE PTFs
 - Fixes
 - New functionality
- 5770-SS1 PTFs for the runtime engine
- 5733-ARE PTFs for the ARE GUI
 - 5733-ARE PTFs are shipped in the 5770-DG1 group
- Latest PTFs are listed on the main ARE product page

ARE PTFs

Fix Description	V7R3M0 ARECore	V7R4M0 ARECore	V7R5M0 ARECore	V1R1M0 AREConsole
Fix for ARE PTF check against PSP failing with HTTP 403	SI85602	SI85603	SI85604	

HOW TO START ARE

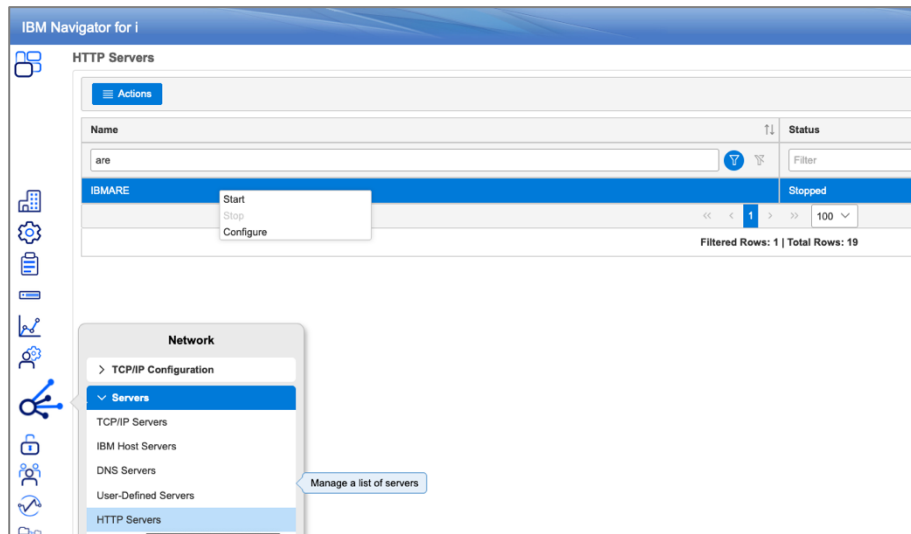
STRTCPSVR SERVER(*HTTP) HTTPSVR(IBMARE)

Type options, press Enter.

2=Change 3=Hold 4=End 5=Work with 6=Release 7=Display message
8=Work with spooled files 13=Disconnect ...

Opt	Subsystem/Job	Current User	Type	CPU %	Function	Status
—	IBMARE	QTMHHTTP	BCH	0,0	PGM-QZHBMAIN	SIGW
—	IBMARE	QTMHHTTP	BCI	0,0	PGM-QZSRLOG	SIGW
—	IBMARE	QTMHHTTP	BCI	0,0	PGM-QZSRHTTP	SIGW
—	IBMARE	QWEBADMIN	BCI	0,0	JVM-/qibm/prod	THDW

or.....



Job Name	Number	Detailed Status	Current User
ibm are	Filter	Filter	Filter
IBMARE	983751	SIGW	QTMHHTTP
IBMARE	983752	SIGW	QTMHHTTP
IBMARE	983754	THDW	QWEBADMIN
IBMARE	983756	SIGW	QTMHHTTP

HOW TO ACCESS ARE

IBM Application Runtime Expert for i http://system_name:12401/are

Deployment Template Editor

The Deployment Template Editor allows users to create, edit, import and export deployment templates. The editor enables users to customize their templates. Templates created, imported, or edited using this editor can be used to verify systems using the 'Launch console' button below. [Learn more...](#)

Manage templates:

Name ↕	Last built by ↕
<input checked="" type="radio"/> ARE_PTF_Sync	RUDI
<input type="radio"/> ARE_in_Action	RUDI
<input type="radio"/> Are_demo_License_Check	RUDI
<input type="radio"/> Are_demo_System_Values	RUDI
<input type="radio"/> Are_demo_User_Usage	RUDI
<input type="radio"/> BRMS_SQL_services_in_action	RUDI
<input type="radio"/> Must_Gather_Tool_Upgrade	RUDI
<input type="radio"/> MyTemplate1	RUDI
<input type="radio"/> Nav4i_Network_Check	RUDI
<input type="radio"/> PTF_Checker_CS	RUDI
<input type="radio"/> PTF_Checker_PSP	RUDI
<input type="radio"/> PTF_Checker_PSP_new	RUDI
<input type="radio"/> PTF_Distribution	RUDI
<input type="radio"/> Powerwire_article_Certificate_expiration_check	RUDI
<input type="radio"/> TestGebruikersUID	THEO
<input type="radio"/> Theo_PTF_CS	THEO
<input type="radio"/> Theo_TemplateTest	THEO

IBM Navigator for i

iclient2- Active

IBM i: 7.5
TR Level: 3

Multisystem

- Custom Charts
- Inquiry Messages
- Administration Runtime Expert**
- Console

Run ARE templates on remote systems

iclient1- Active

IBM i: 7.4
TR Level: 9
CPU: 19.41
Active jobs: 213
System ASP %: 77.60 ⚠

Hosted Client

Collect and verify customized sets of information about an application, its runtime environment, and the IBM i system that it runs on

IBM Navigator for i

Administration Runtime Expert - Console

Default - rudi

iclients

Actions

System Name	User ID	Has Password	Templates
Filter	Filter	Filter	Filter

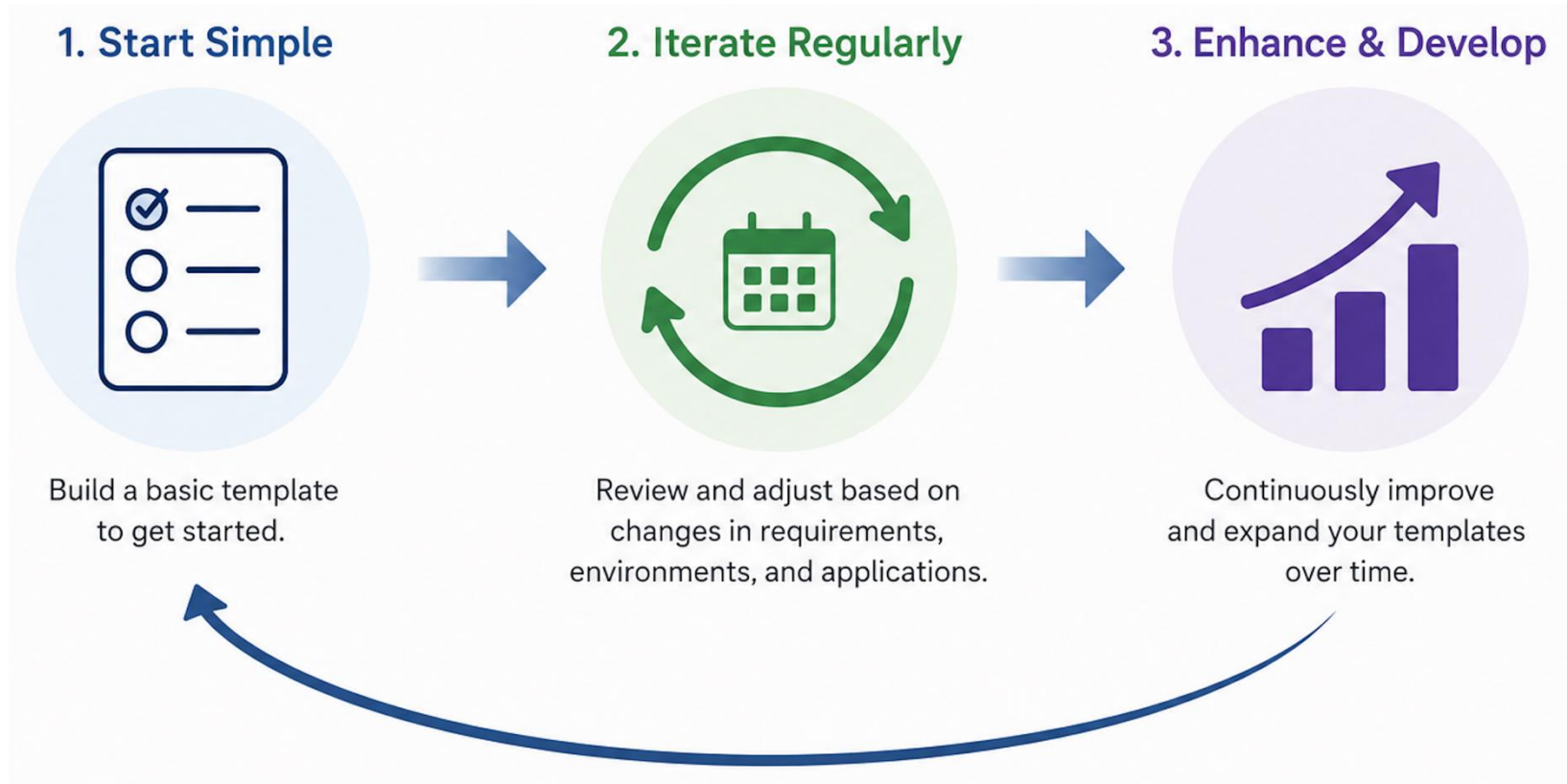
No records found

Total Rows: 0

ARE – GETTING STARTED



GETTING STARTED



VERIFY PORT STATUS

The screenshot shows the IBM Application Runtime Expert for i web interface. The browser address bar indicates the URL is common1.frankeni.com:12401/are/. The page title is "IBM Application Runtime Expert for i". The breadcrumb navigation is "Home > Plugin Selection and Customization > Ports".

Ports
Specify Ports to Verify

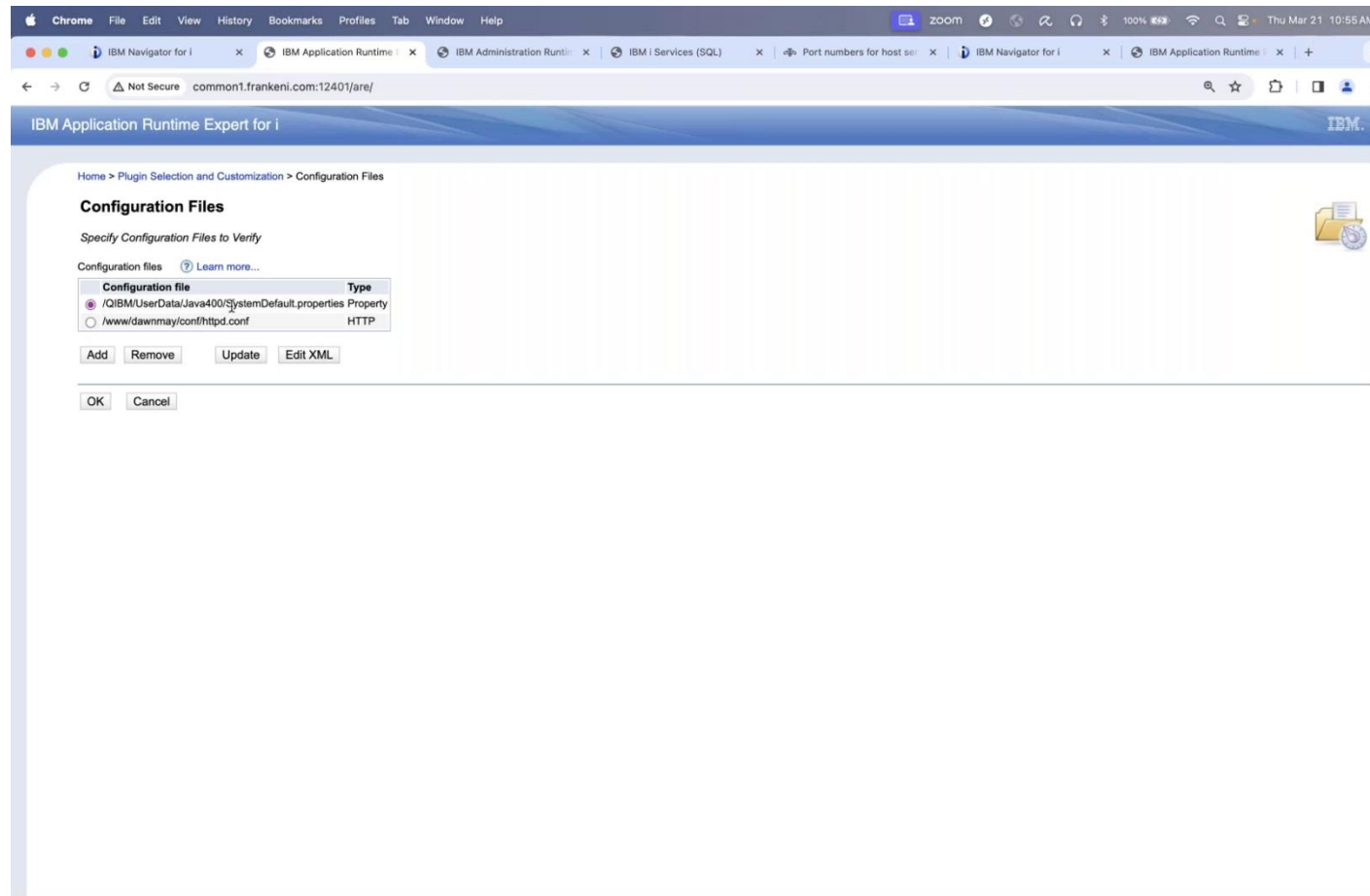
Port status: [? Learn more...](#)

Port	Expected status	Severity
<input type="checkbox"/> 8470	Not Use	Error
<input type="checkbox"/> 9470	In Use	Error
<input type="checkbox"/> 8471	Not Use	Error
<input type="checkbox"/> 9471	In Use	Error
<input type="checkbox"/> 8472	Not Use	Error
<input type="checkbox"/> 9472	Not Use	Error
<input type="checkbox"/> 8473	Not Use	Error
<input type="checkbox"/> 9473	In Use	Error
<input type="checkbox"/> 8474	Not Use	Error
<input type="checkbox"/> 9474	In Use	Error
<input type="checkbox"/> 8475	Not Use	Error
<input type="checkbox"/> 9475	In Use	Error
<input type="checkbox"/> 8476	Not Use	Error
<input type="checkbox"/> 9476	In Use	Error
<input type="checkbox"/> 446	Not Use	Error
<input type="checkbox"/> 448	In Use	Error
<input type="checkbox"/> 23	Not Use	Error
<input type="checkbox"/> 992	In Use	Error

Restricted port ranges: [? Learn more...](#)

Starting port	Ending port	Severity
<input type="checkbox"/>		Error

CHECK IFS CONFIGURATION FILES



CHECK IFS CONFIGURATION FILES

Home > Plugin Selection and Customization > Configuration Files > Customize Configuration File

Customize Configuration File

Select Configuration Values to Verify

Configuration file: /QIBM/UserData/Java400/SystemDefault.properties

Key	Expected value	Edit
<input checked="" type="checkbox"/> log4j2.formatMsgNoLookups	true	Edit
<input checked="" type="checkbox"/> -Xgcthreads	08	Edit

CHECK IFS CONFIGURATION FILES

The screenshot shows the IBM Application Runtime Expert for i web interface. The main page is titled "Customize Configuration File" and displays a table of configuration keys. A dialog box titled "Edit Expected Value" is open, showing settings for the key "-Xgcthreads".

Configuration File Table:

Key	Expected value	Edit
<input checked="" type="checkbox"/> log4j2.formatMsgNoLookups	true	Edit
<input checked="" type="checkbox"/> -Xgcthreads	08	Edit

Edit Expected Value Dialog:

- Key: -Xgcthreads
- Radio buttons: Report only, Verify this value
- Value type: String, Comparison: Equals
- Expected value: 08
- Severity: Error, Warning, Info (selected)
- Match case:

Description: Equals. The actual value must equal the expected value.

Examples Table:

Actual value	Comparison	Expected value	Result
mystring	Equals	mystring	True
mystring	Equals	somestring	False

CHECKING USERS



General

Basic user profile information



Security

Password rules, failed logon attempts, account status



Groups & Roles

Group memberships and role assignments



Authorization

Authorization to applications and data



Special Authorities

Special authorities assigned to the user



Session Information

Current sessions and logon activity



Account Expires

Account expiration date and status



Sign-on Information

Last sign-on date, time, and program



Profile Attributes

Custom and system-defined profile attributes



Proxy Information

Proxy settings and relationships

CHECK USERS WITH DEFAULT PASSWORD

IBM Application Runtime Expert for i

Home > Plugin Selection and Customization > SQL Query Verifier > Customize SQL Query Verifier

Customize SQL Query Verifier

Specify the SQL Query and Verifications Details

Collection name:

Select statement [? Learn more...](#)

```
SELECT AUTHORIZATION_NAME, PREVIOUS_SIGNON, TEXT_DESCRIPTION, LAST_USED_TIMESTAMP  
FROM QSYS2.USER_INFO  
WHERE USER_DEFAULT_PASSWORD = 'YES';
```

Example: *SELECT * FROM myDB.myTable*

Print the result set of SQL query to the verification report: ▾

Check the number of records returned for the SQL query [? Learn more...](#)

Expect value:

Comparison: ▾

Severity: ▾

Column value verification conditions [? Learn more...](#)

Column name	Check class	Expected value	Comparison	Result type	Match case	Severity	Description
Example id	Numeric	6	Equals	All	False	Error	All ids should equal to 6
Example name	String	John	Contains substring	Any	True	Error	Names returned should contain 'John'

This table is empty.



CHECK USERS WITH DEFAULT PASSWORD

IBM Application Runtime Expert for i

Console > Result

Console

System verification status: 1/1 complete [Refresh](#)

System name	Template	Status	Result
geeltje	Default_Password	 Complete	 1 error(s), 0 warning(s), 0 info(s)

[Back](#) [Stop all](#)

CHECK SPECIAL AUTHORITY

Home > Plugin Selection and Customization > SQL Query Verifier > Customize SQL Query Verifier

Customize SQL Query Verifier

Specify the SQL Query and Verifications Details

Collection name:

Select statement [Learn more...](#)

```
select AUTHORIZATION_NAME, SPECIAL_AUTHORITIES from qsys2.user_info where SPECIAL_AUTHORITIES like '%*ALLOBJ%'
```

Example: `SELECT * FROM myDB.myTable`

Print the result set of SQL query to the verification report:

Check the number of records returned for the SQL query [Learn more...](#)

Expect value:

Comparison:

Severity:

Column value verification conditions [Learn more...](#)

Column name	Check class	Expected value	Comparison	Result type	Match case	Severity	Description	
<i>Example id</i>	Numeric	6	Equals	All	False	Error	All ids should equal to 6	
<i>Example name</i>	String	John	Contains substring	Any	True	Error	Names returned should contain 'John'	
<input checked="" type="checkbox"/>	AUTHORIZATION_NAME	String	DAWNM	Contains substring	Any	True	Info	DAWNM should have *P
<input checked="" type="checkbox"/>	AUTHORIZATION_NAME	String	DAWNMAY	Does not contain substring	All	True	Error	DAWNMAY should not f
<input checked="" type="checkbox"/>	AUTHORIZATION_NAME	String	DAWNTWO	Does not contain substring	All	True	Error	DAWNTWO has *ALLO

CHECK CERTIFICATE EXPIRATION

The screenshot displays the Maxava SQL IDE interface. The main editor window contains a SQL query with the following content:

```
1 -- category: IBM i Services
2 -- description: Security - Certificate attribute analysis
3 -- minvrm: v7r3m0
4
5
6 -- Review the certificate store detail using the
7 -- Find the certificates that are no longer valid
8
9 select *
10 from table (
11     qsys2.certificate_info(certificate_store_password => '*NOPWD')
12 )
13 where validity_end < current date + 1 month
14 order by validity_end;
15
16
```

An 'Examples' panel is open in the foreground, showing a search for 'cert' and a list of search results. The first result is highlighted:

- cert
- How to incorporate passwords in my SQL
- Is this IBM i at risk of a known defective
- Security - Certificate attribute analysis

The 'Examples' panel also displays a snippet of SQL code:

```
-- category: IBM i Services
-- description: Security - Certificate attribute analysis
-- minvrm: v7r3m0
--
-- Review the certificate store detail using the stashed password file
-- Find the certificates that are no longer valid, or that become invalid
--
select *
from table (
    qsys2.certificate_info(certificate_store_password => '*NOPWD')
)
where validity_end < current date + 1 month
order by validity_end;
```

A red circle highlights the 'SQL' icon in the top toolbar, with a red arrow pointing to the 'Examples' panel.

CHECK CERTIFICATE EXPIRATION

IBM Application Runtime Expert for i

Home > Plugin Selection and Customization > SQL Query Verifier > Customize SQL Query Verifier

Customize SQL Query Verifier

Specify the SQL Query and Verifications Details

Collection name:

Select statement [? Learn more...](#)

```
select *
  from table (
    qsys2.certificate_info(certificate_store_password => '*NQPWD')
  )
 where validity_end < current date + 100 month
```

Example: `SELECT * FROM myDB.myTable`

Print the result set of SQL query to the verification report:

Check the number of records returned for the SQL query [? Learn more...](#)

Expect value:

Comparison:

Severity:

Column value verification conditions [? Learn more...](#)

	Column name	Check class	Expected value	Comparison	Result type	Match case	Severity	Description
Example id	Numeric	6	Equals	All	False	Error	All ids should equal to 6	
Example name	String	John	Contains substring	Any	True	Error	Names returned should contain 'John'	
							This table is empty.	

PLUGINS

PLUGIN

Extend. Integrate. Enhance.

Plugins extend core functionality by connecting seamlessly with existing systems.



EXTEND

Add new capabilities without disrupting the core.



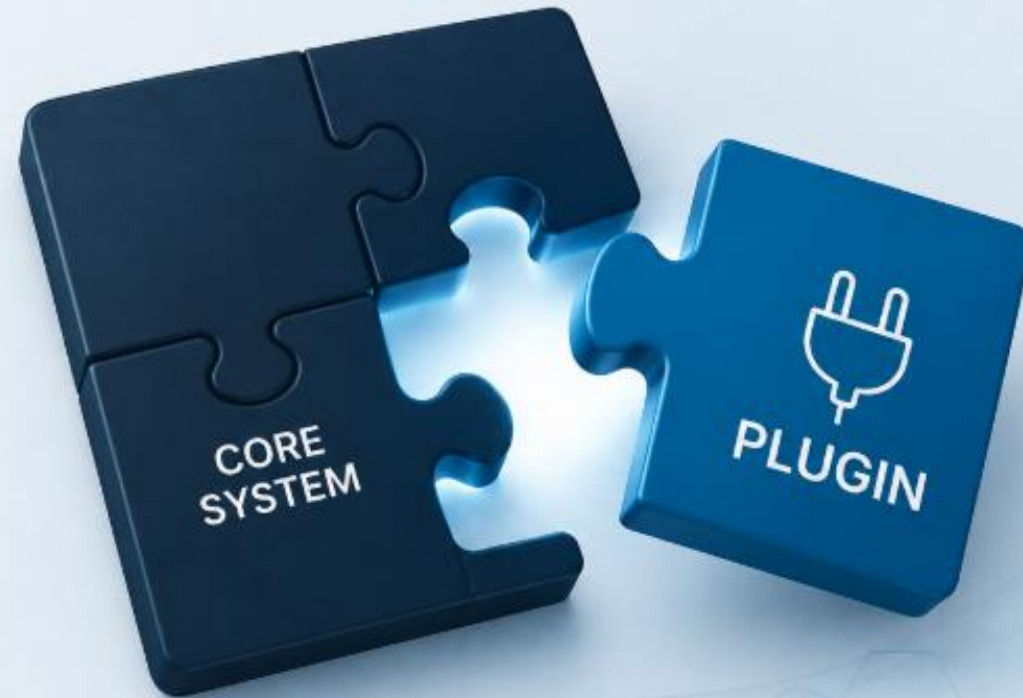
INTEGRATE

Connect seamlessly with existing systems and tools.



ENHANCE

Improve functionality and deliver greater value.



CUSTOM PLUGINS

Security Drift Detection

- Users with *ALLOBJ
- Users with *SECADM
- Default passwords enabled
- Service accounts disabled/enabled
- Public authority changes
- Exit point registrations

HA/DR Replication Status

- Replication status
- Journal receiver growth
- Journaling enabled on critical libraries
- Backup completion codes
- ASP utilisation

RUNNING CHECKS

The screenshot shows the IBM Navigator for i web interface. The browser address bar indicates the URL is `common1.frankeni.com:2002/Navigator/mainframe/dashboard-card`. The dashboard displays three system cards:

- common1- Active**: Multisystem card with a menu containing Custom Charts, Inquiry Messages, Administration Runtime Expert, and Console. A tooltip for Console says "Run ARE templates on remote systems".
- common75- Active**: Card showing system metrics: IBM i: 7.5, TR Level: 3, CPU: 0.97, Active jobs: 324, System ASP %: 70.51 (Warning). Labeled as COMMON 7.5 Partition.
- dev740- Active**: Card showing system metrics: IBM i: 7.4, TR Level: 9, CPU: 41.17, Active jobs: 222, System ASP %: 77.60 (Warning).

The status bar at the bottom of the browser shows `common1.frankeni.com:2002/Navigator/mainframe/are/console`.

RUNNING CHECKS

General

Enable email notifications

SMTP server name*:

Port:

From*:

Send on:

To*:

Add Group

General

Run schedule: v

Email Notifications

Every:

Schedule

At:

RESULTS – SUMMARY

The screenshot shows the IBM Navigator for i Administration Runtime Expert - Verify Systems console. The console displays a table with the following data:

System Name	User ID	Templates	Core Version	Status	Result
common1.frankeni.com	DAWNM	AREWebinarSampleTemplate	1.6.23	Complete	50 error(s), 0 warning(s), 0 info

The table includes filter boxes for each column and a pagination control showing 'Total Rows: 1'.

RESULTS – SUMMARY

common1.frankeni.com DAWNNAV AREWebinarSampleTemplate 1.6.23 Complete 57 error(s), 0 warning(s), 0 info

Plugin Name ↑↓	Attributes Verified ↑↓	Errors ↑↓	Warnings ↑↓	Info ↑↓	Action ↑↓
Authority Verifier	32	0	0	0	
Command Verifier	7	3	0	0	Details
Configuration Attribute Verifier	18	1	0	0	Details
Environment Variable Verifier	15	1	0	0	Details
File Attribute Verifier	360	23	0	0	Details
Network Configuration Checker	0	0	0	0	
Network Verifier	0	0	0	0	
PTF Verifier	43	3	0	0	Fixes
Port Verifier	18	10	0	0	Details
SQL Query Verifier	26	14	0	0	Details
System Value Verifier	48	2	0	0	Details
User Profile Verifier	140	0	0	0	

System Value Verifier - Fixes

Details

Fixes

Description  ↑↓

System value 'QAUDLVL' does not match its expected value

System value 'QMAXSIGN' does not match its expected value

RESULTS – SUMMARY

The screenshot shows a web browser window displaying the IBM Navigator for i interface. A modal window titled "View Summary Report" is open, showing a list of error messages. The browser's address bar shows the URL: `common1.frankeni.com:2002/Navigator/mainframe/are/verify?groupName=DawnGroup&option=selected`. The report content includes:

```
File Path: /QIBM/UserData/ARE/workspace/console/temp/DawnGroup/20240321122011_M/common1.frankeni.com_AREWebinarSampleTemplate_dawnm/arercReport.zip:reports/summaryReport.txt

ERROR! Port 8476 was expected to be free, but it is currently in use.
ERROR! Port 9476 is currently not in use, but it was expected to be.
ERROR! Port 446 was expected to be free, but it is currently in use.
ERROR! Port 23 was expected to be free, but it is currently in use.
> Total number of port items checked: 18

Running plugin System Value Verifier
ERROR! System value 'QAUDLVL' does not match its expected value
Details: Expected QAUDLVL to equal ["*AUTFAIL" *CREATE" *DELETE" *PGMFAIL" *SAVRST" *SERVICE" *NETFAIL" *SECCFG" *SECURUN]
Details: Actual value for QAUDLVL is ["*AUTFAIL" *CREATE" *DELETE" *NETTELSVR" *PGMFAIL" *SECURITY" *OFCSRV]
ERROR! System value 'QMAXSIGN' does not match its expected value
Details: Expected QMAXSIGN to equal 000005
Details: Actual value for QMAXSIGN is 000006
> Total number of system values items checked: 48

Running plugin SQL Query Verifier
ERROR! Verify_ALLOBJ_Users - Fail: the result count is not expected. 246 equals 10 is false!
ERROR! Verify_ALLOBJ_Users - Fail: DAWNTWO does not contain substring DAWNTWO
ERROR! Check_Invalid_Signon_Attempts - Fail: 11327335 less than 100
ERROR! Check_Invalid_Signon_Attempts - Fail: ROOT does not equal ROOT
ERROR! Check_Invalid_Signon_Attempts - Fail: ADMIN does not equal ADMIN
ERROR! Verify_QIBM_DB_SECADM_Users - Fail: DAWNUSER does not contain substring DAWNUSER
ERROR! Verify_QAUDJRN - Exception occurred during verifying field OBJCREATED. Check log for details.
ERROR! Verify_Autostart_TCP_Servers - Fail: *FTP does not contain substring *FTP
ERROR! Verify_ODBC_Exit_Program - Fail: the result count is not expected. 0 equals 1 is false!
ERROR! Verify_ODBC_Exit_Program - Error: All values in result set do not match expected result.
ERROR! Verify_ODBC_Exit_Program - Error: All values in result set do not match expected result.
ERROR! Verify_Exit_Points - Error: All values in result set do not match expected result.
```

At the bottom right of the report window, there are buttons for "Refresh", "Download", and "Close".

RUNNING CHECKS

The screenshot shows a web browser window with the URL `common1.frankeni.com:2002/Navigator/mainframe/are/verify?groupName=DawnGroup&option=selected`. A modal window titled "View Summary Report" is open, displaying the following text:

```
File Path: /QIBM/UserData/ARE/workspace/console/temp/DawnGroup/20240321122011_M/common1.frankeni.com_AREWebinarSampleTemplate_dawnm/arercReport.zip/reports/summaryReport.txt

Running with user: DAWNM
User DAWNM has *ALLOBJ authority

Running plugin Network Verifier

Running plugin Network Configuration Checker

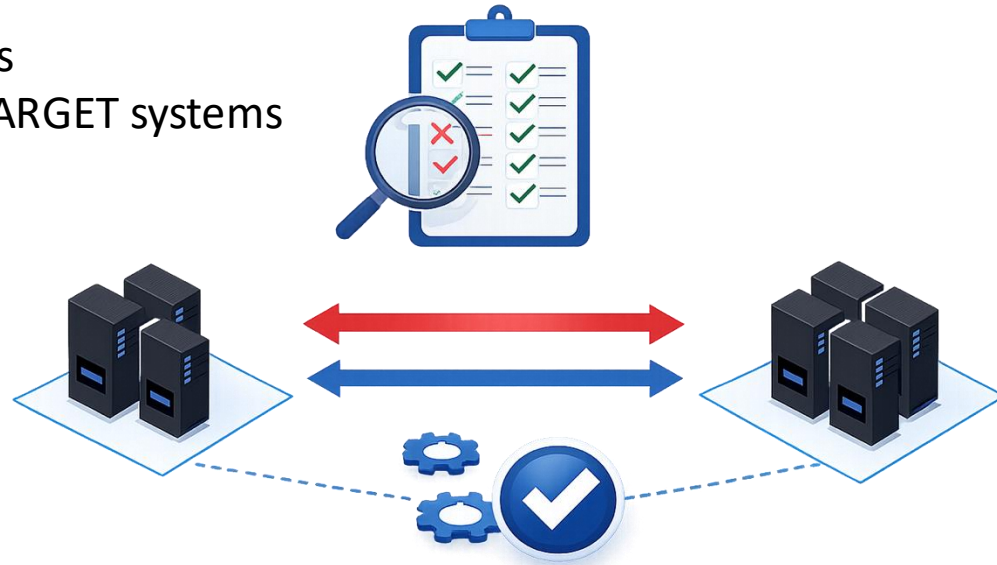
Running plugin Port Verifier
ERROR! Port 8470 was expected to be free, but it is currently in use.
ERROR! Port 9470 is currently not in use, but it was expected to be.
ERROR! Port 8471 was expected to be free, but it is currently in use.
ERROR! Port 9471 is currently not in use, but it was expected to be.
ERROR! Port 8472 was expected to be free, but it is currently in use.
ERROR! Port 8473 was expected to be free, but it is currently in use.
ERROR! Port 8474 was expected to be free, but it is currently in use.
ERROR! Port 9474 is currently not in use, but it was expected to be.
ERROR! Port 8475 was expected to be free, but it is currently in use.
ERROR! Port 9475 is currently not in use, but it was expected to be.
ERROR! Port 8476 was expected to be free, but it is currently in use.
ERROR! Port 9476 is currently not in use, but it was expected to be.
ERROR! Port 446 was expected to be free, but it is currently in use.
ERROR! Port 23 was expected to be free, but it is currently in use.
> Total number of port items checked: 18

Running plugin System Value Verifier
ERROR! System value 'QAUDLVL' does not match its expected value
Details: Expected QAUDLVL to equal ['*AUTFAIL' '*CREATE' '*DELETE' '*PGMFAIL' '*SAVRST' '*SERVICE' '*NETFAIL' '*SECCFG' '*SECURN']
Details: Actual value for QAUDLVL is ['*AUTFAIL' '*CREATE' '*DELETE' '*NETTEL SVR' '*PGMFAIL' '*SECURITY' '*DFCSRVL']
```

At the bottom of the report, there are buttons for "Refresh", "Download", and "Close".

LIVE DEMONSTRATION

- Check, distribute and if necessary, apply PTFs
 - Compare PTF's between SOURCE and TARGET systems
 - Report the differences
 - Optionally distribute the differences
 - Apply the differences



TAKEAWAYS

- I now know what problem ARE solves
- I know where to find it
- I know how to install it
- I can start using it next week

IT'S NOT IF, IT'S WHEN



How Administration Runtime Expert helps



Reduces preventable downtime
with health and configuration checks



Speeds diagnosis
by comparing current state
to a known-good baseline



Supports governance
with evidence that critical IBM i
runtime settings are monitored

FREE WHITE PAPER



Introduction

Administration Runtime Expert is designed for System Administrators to streamline and enhance the management of IBM i runtime environments.

With a focus on proactive administration, Administration Runtime Expert equips administrators with insights into a variety of areas, and by leveraging the tool to its full capabilities better informed decisions can be made, ultimately maximizing availability.

In this white paper, we explore the functionalities and benefits of Administration Runtime Expert, backed up by practical use cases, to empower IBM i System Administrators with the knowledge necessary to confidently manage their IBM i estate.

What is Administration Runtime Expert?

IBM Administration Runtime Expert (ARE) is a powerful tool for ensuring consistency and stability in your IBM i environment. Imagine it as a meticulous inspector, examining system settings, application attributes, and network configurations against pre-defined templates. If ARE finds any discrepancies, it generates detailed reports highlighting the differences, empowering you to take corrective action.

With ARE, you can tackle a wide range of tasks including:

- **Verify environment health:** Define ideal system and application settings, then let ARE scan your partitions and report any deviations. This helps prevent unexpected behavior and ensures consistency across development, test, and production environments.
- **Manage PTFs (Program Temporary Fixes):** Easily compare PTF levels across multiple systems, identify missing updates, and even automate their deployment. This simplifies maintenance and keeps your IBM i running smoothly.



- **Track configuration changes:** Monitor critical settings for unauthorized modifications and receive prompt alerts if anything deviates from the baseline, strengthening security and simplifying troubleshooting.

ARE is not a catch-all solution. It excels at comparing and reporting on configurations, but it doesn't directly manage system resources or perform complex automation tasks. Think of it as a vigilant advisor, providing valuable insights, but ultimately leaving the decision-making and execution to you.

Thank You

