Integration Technical Conference 2019

Application Integration

A02 What's New in ACEv11

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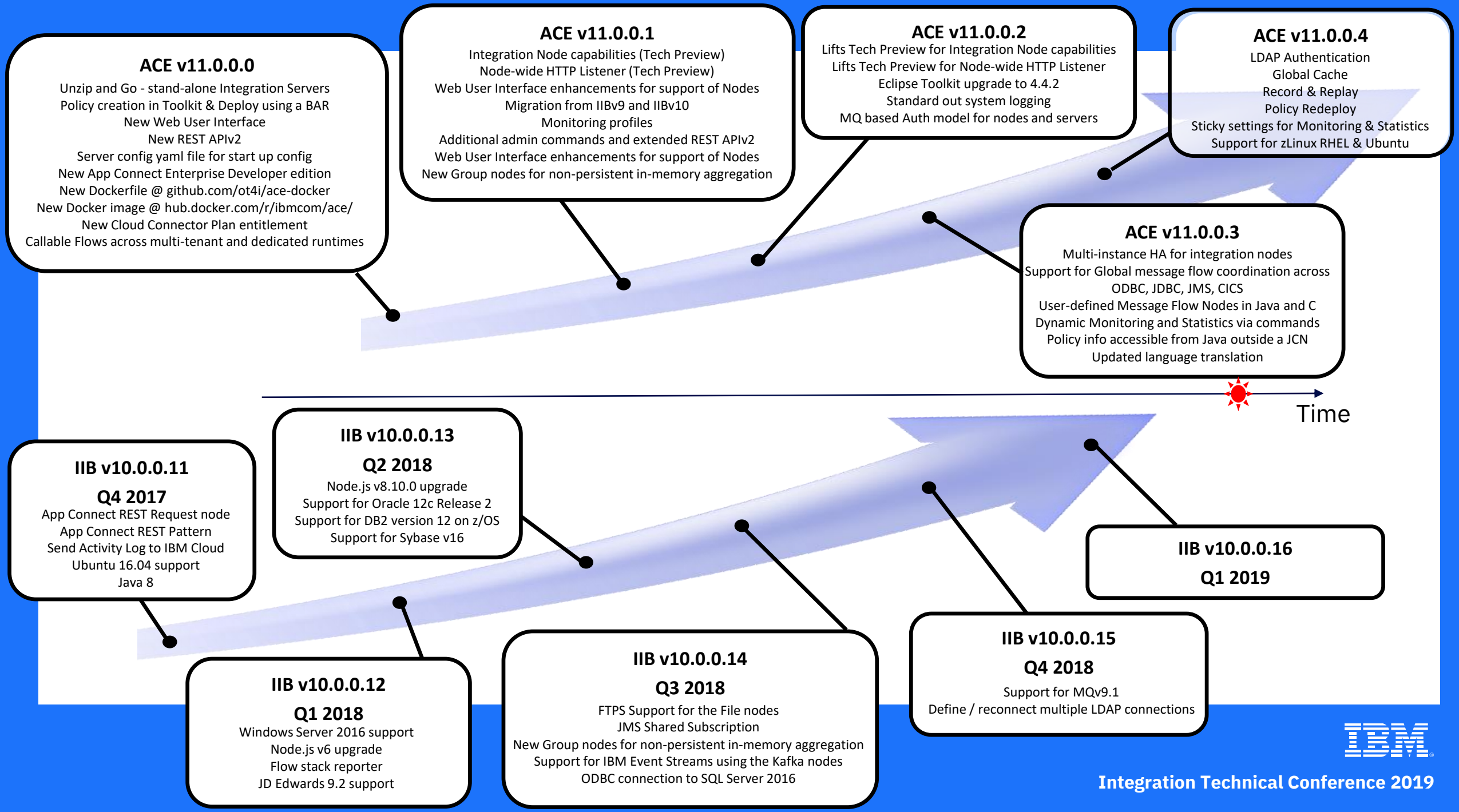
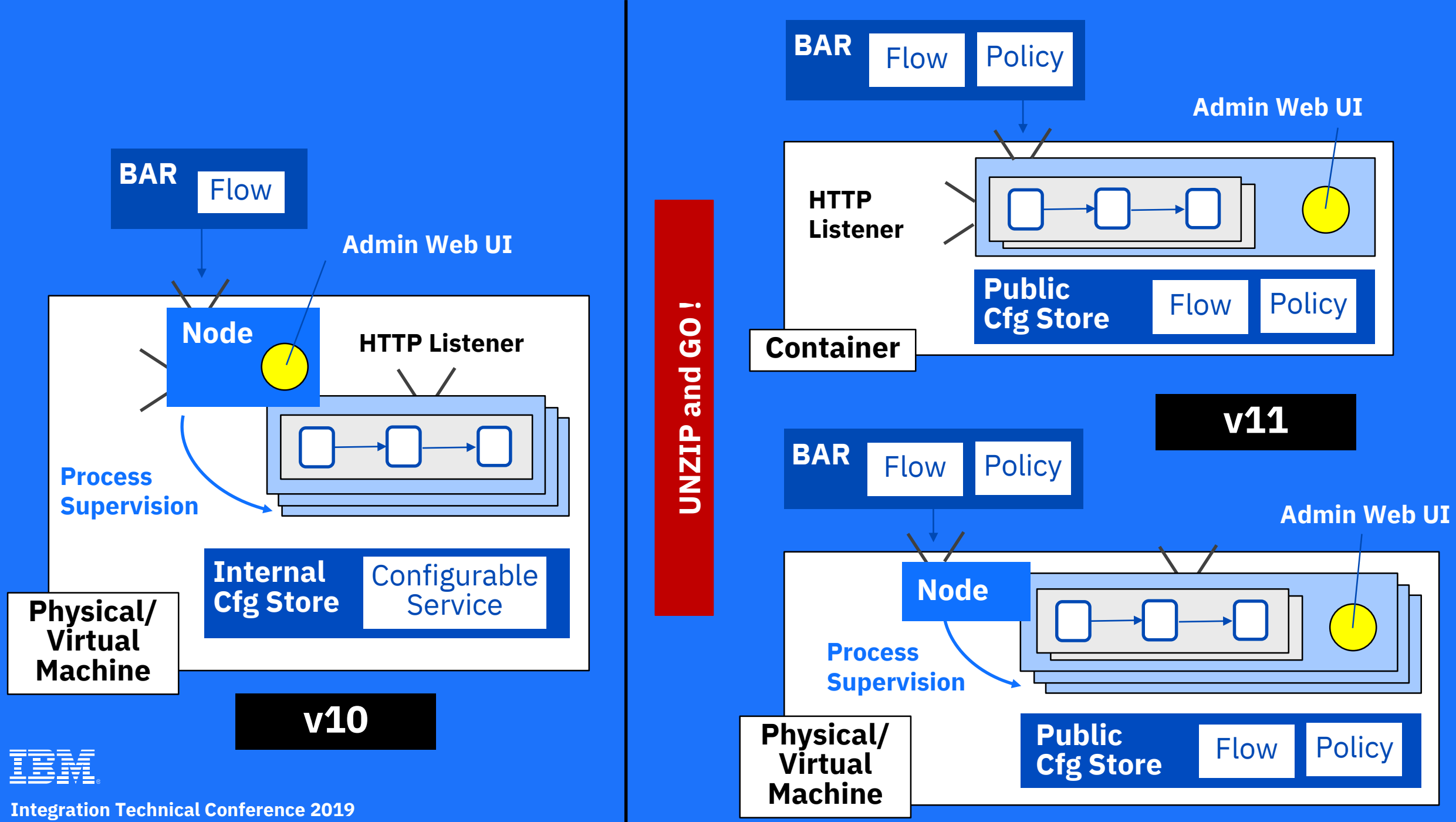
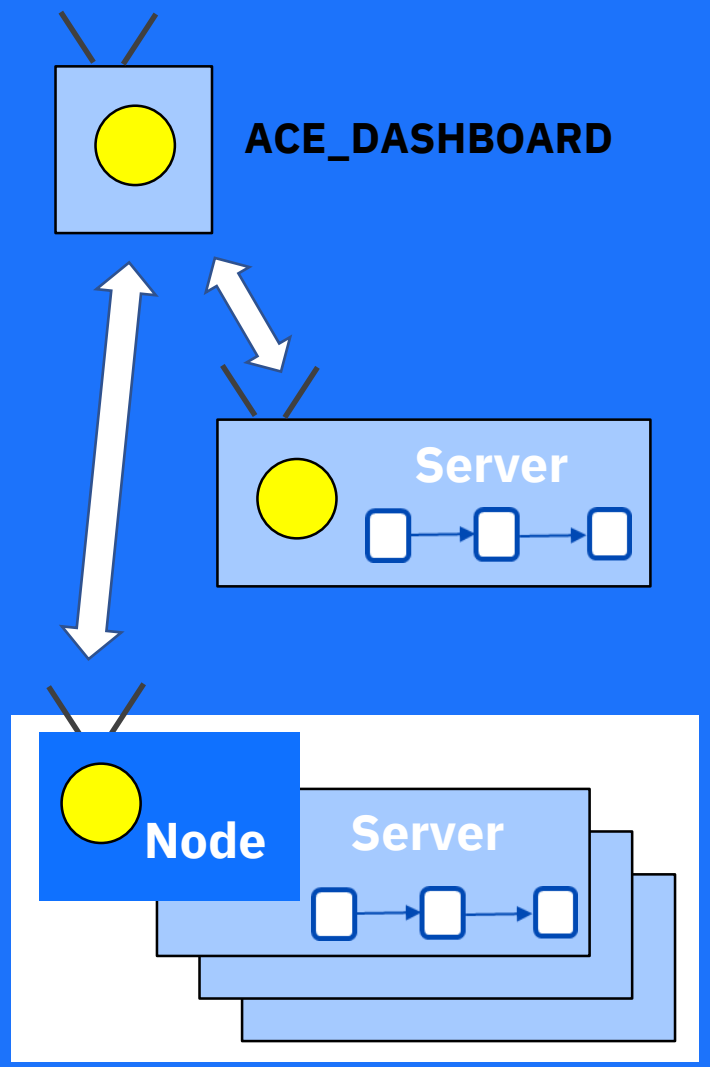
IBM **Cloud**

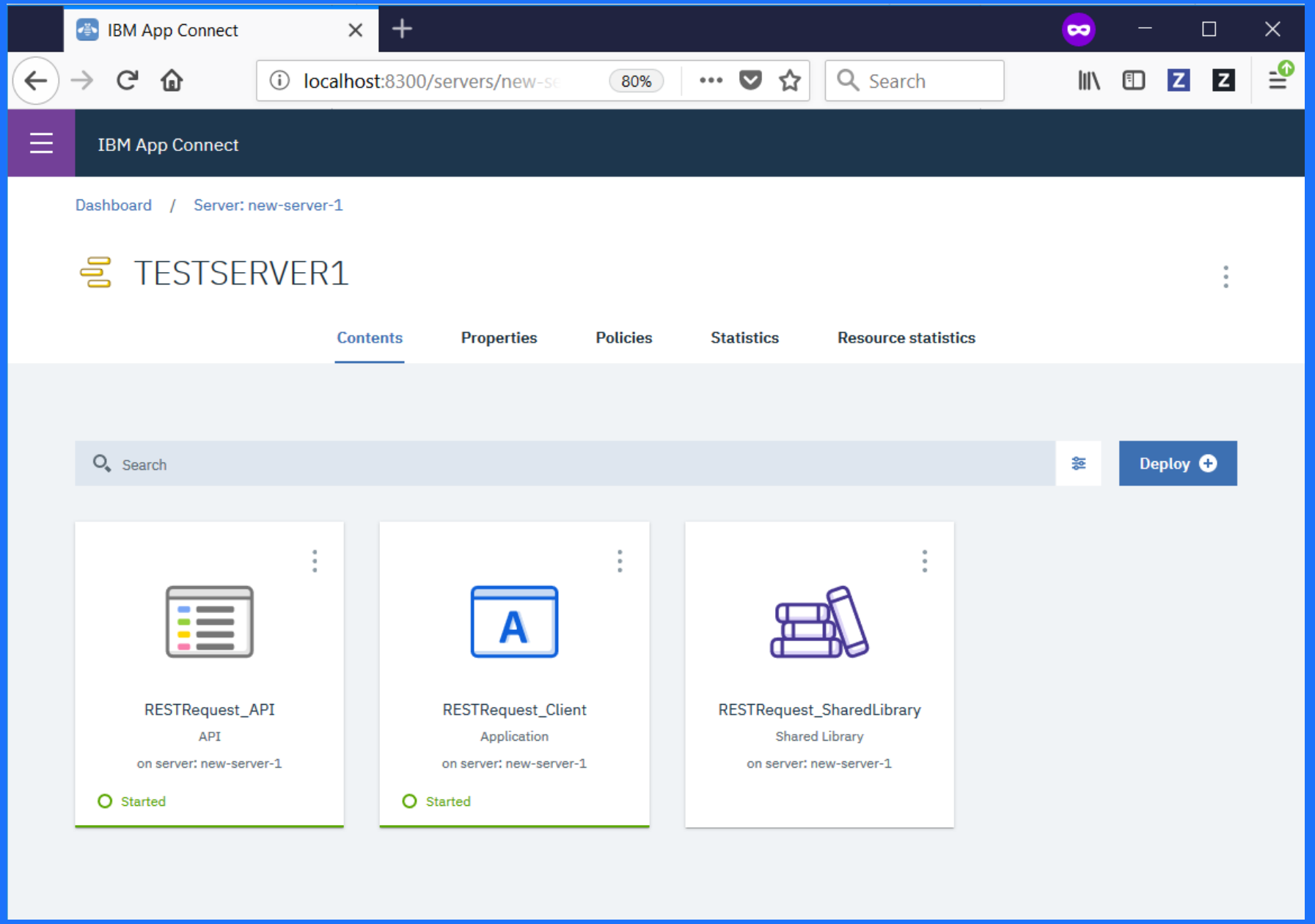
IBM


ACE v11.0.0.0
Unzip and Go - stand-alone Integration Servers
Policy creation in Toolkit & Deploy using a BAR
New Web User Interface
New REST APIv2
Server config yaml file for start up config
New App Connect Enterprise Developer edition
New Dockerfile @ github.com/ot4i/ace-docker
New Docker image @ hub.docker.com/r/ibmcom/ace/
New Cloud Connector Plan entitlement
Callable Flows across multi-tenant and dedicated runtimes
ACE v11.0.0.1
Integration Node capabilities (Tech Preview)
Node-wide HTTP Listener (Tech Preview)
Web User Interface enhancements for support of Nodes
Migration from IIBv9 and IIBv10
Monitoring profiles
Additional admin commands and extended REST APIv2
Web User Interface enhancements for support of Nodes
New Group nodes for non-persistent in-memory aggregation
ACE v11.0.0.2
Lifts Tech Preview for Integration Node capabilities
Lifts Tech Preview for Node-wide HTTP Listener
Eclipse Toolkit upgrade to 4.4.2
Standard out system logging
MQ based Auth model for nodes and servers
ACE v11.0.0.4
LDAP Authentication
Global Cache
Record & Replay
Policy Redeploy
Sticky settings for Monitoring & Statistics
Support for zLinux RHEL & Ubuntu
ACE v11.0.0.3
Multi-instance HA for integration nodes
Support for Global message flow coordination across
ODBC, JDBC, JMS, CICS
User-defined Message Flow Nodes in Java and C
Dynamic Monitoring and Statistics via commands
Policy info accessible from Java outside a JCN
Updated language translation
Time
IIB v10.0.0.11
Q4 2017
App Connect REST Request node
App Connect REST Pattern
Send Activity Log to IBM Cloud
Ubuntu 16.04 support
Java 8
IIB v10.0.0.13
Q2 2018
Node.js v8.10.0 upgrade
Support for Oracle 12c Release 2
Support for DB2 version 12 on z/OS
Support for Sybase v16
IIB v10.0.0.12
Q1 2018
Windows Server 2016 support
Node.js v6 upgrade
Flow stack reporter
JD Edwards 9.2 support
IIB v10.0.0.14
Q3 2018
FTPS Support for the File nodes
JMS Shared Subscription
New Group nodes for non-persistent in-memory aggregation
Support for IBM Event Streams using the Kafka nodes
ODBC connection to SQL Server 2016
IIB v10.0.0.15
Q4 2018
Support for MQv9.1
Define / reconnect multiple LDAP connections
IIB v10.0.0.16
Q1 2019

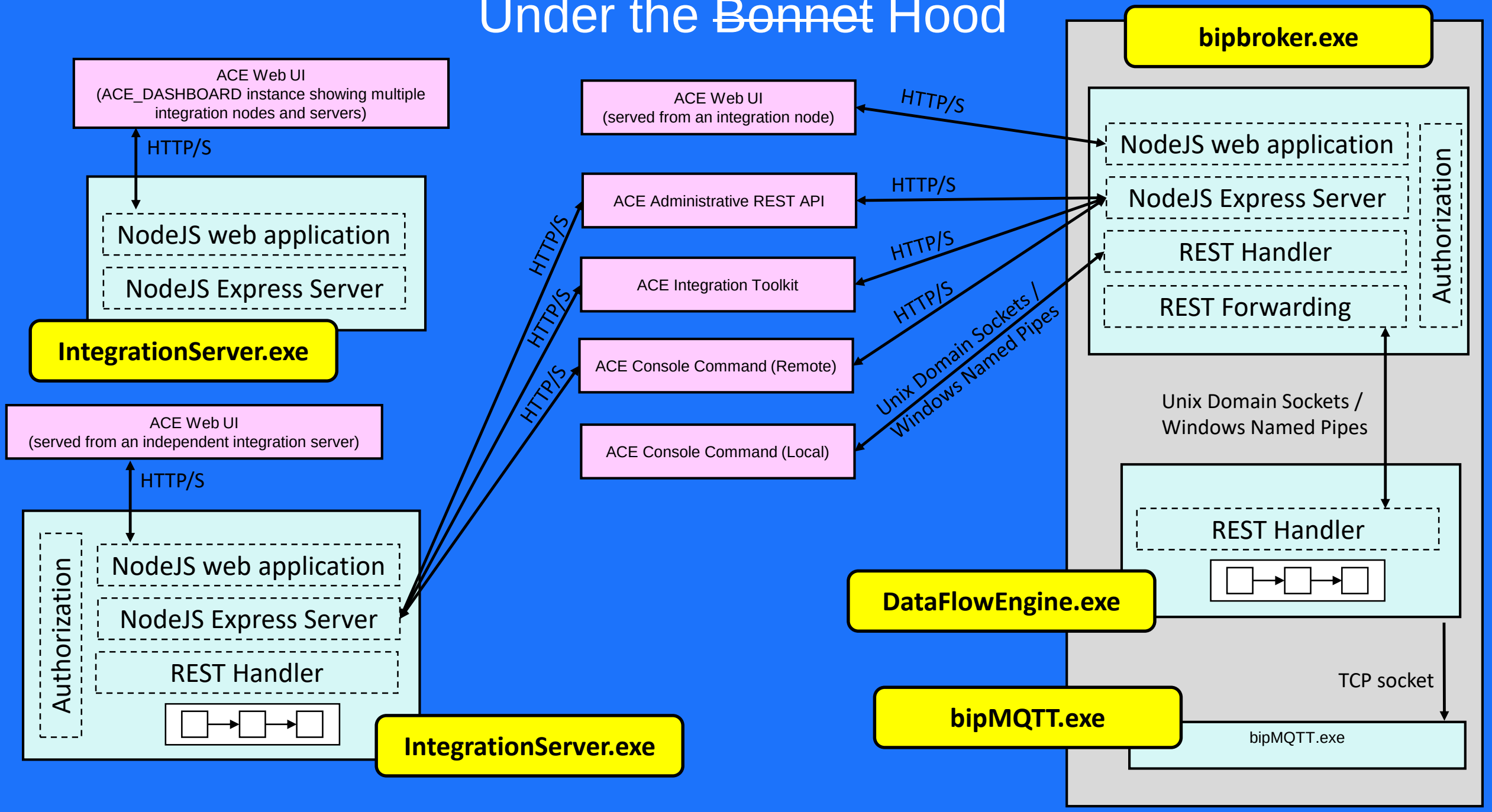

BAR
Flow
Admin Web UI
Node
HTTP Listener
Process
Supervision
Internal
Cfg Store
Configurable
Service
Physical/
Virtual
Machine
v10
UNZIP and GO !
BAR
Flow
Policy
Admin Web UI
HTTP
Listener
Public
Cfg Store
Flow
Policy
Container
v11
BAR
Flow
Policy
Admin Web UI
Node
Process
Supervision
Public
Cfg Store
Flow
Policy
Physical/
Virtual
Machine

The ACEv11 Administration Web User Interface





Under the ~~Bonnet~~ Hood

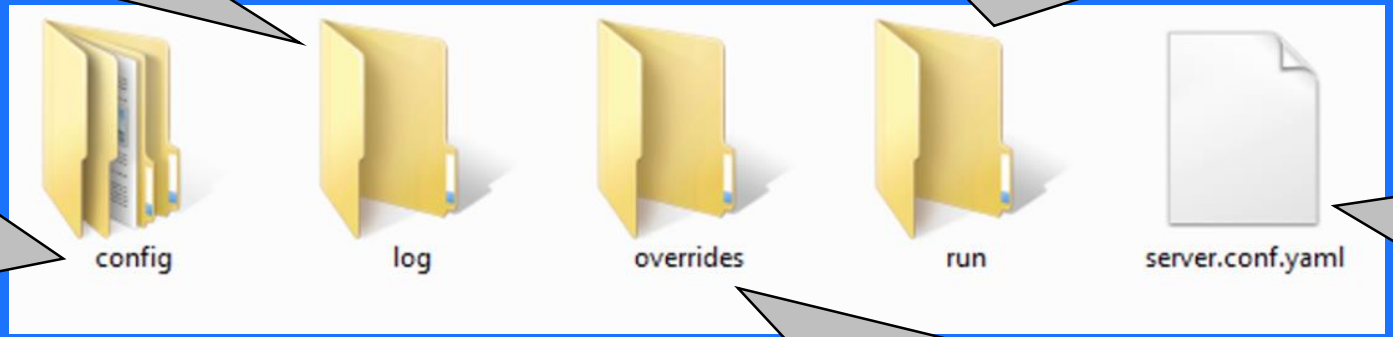


```
C:\Program Files\IBM\ACE\11.0.0.4>  mqsicreateworkdir C:\myServer
```

```
IntegrationServer
          --work-dir C:\myServer
          --admin-rest-api 7600
          --http-port-number 7900
          --name myServer
          --mq-queue-manager-name myServerQMgr
          --console-log
```

The ***log*** directory holds event files containing BIP messages.

The ***run*** directory contains the unzipped deployed content from BAR files.

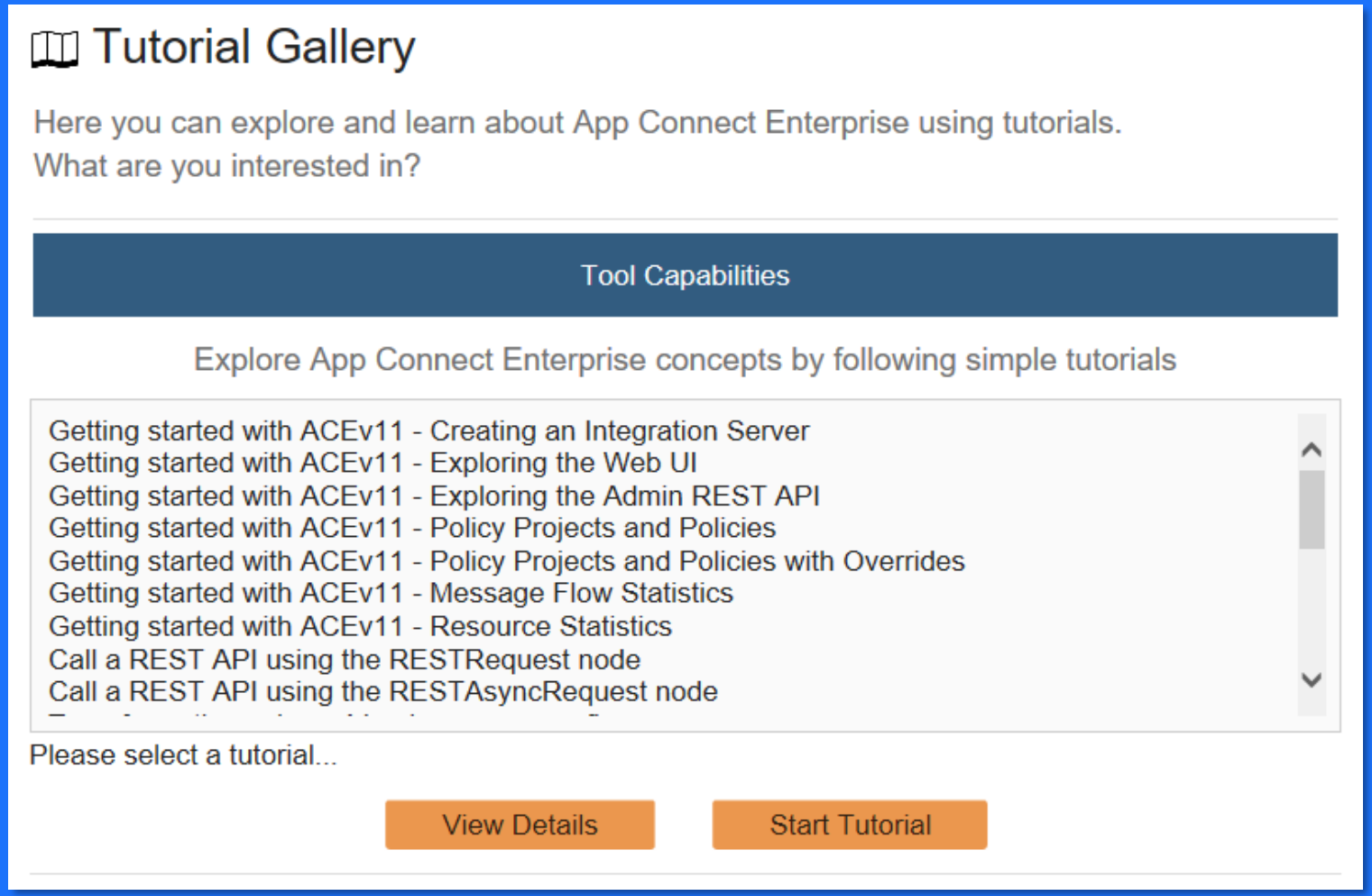


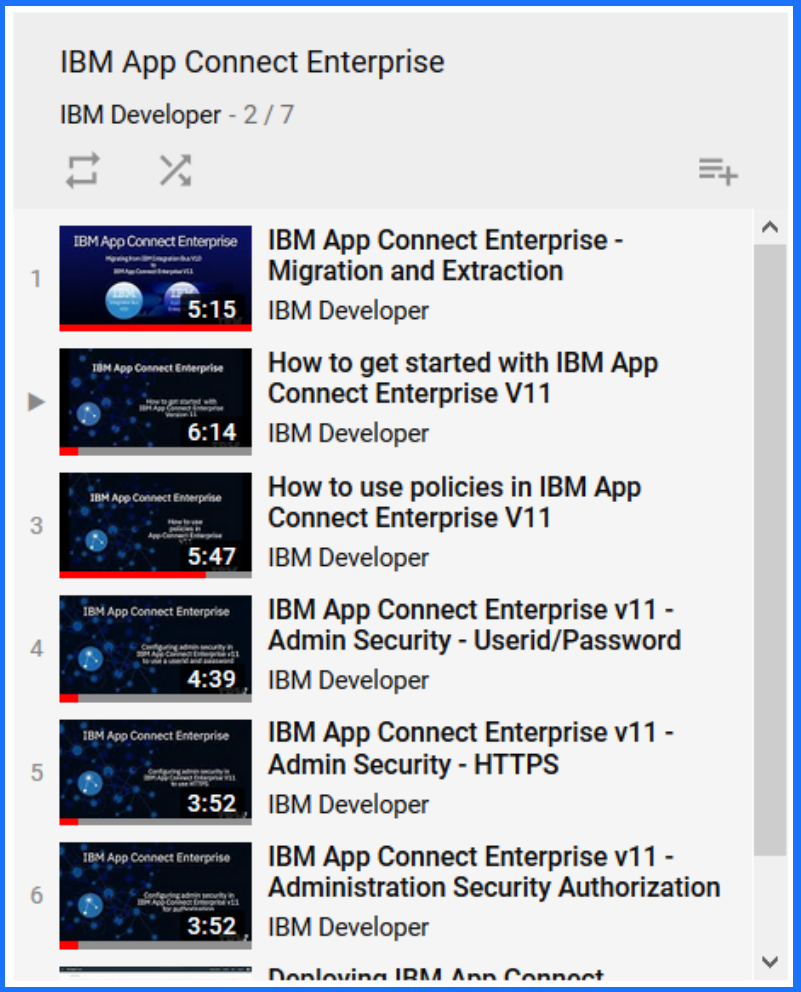
server.conf.yaml contains configuration for how the Integration Server should run.

The ***config*** directory holds configuration files (eg for loopback, switch, security config etc.)

The ***overrides*** directory holds files which override server configuration or policies.

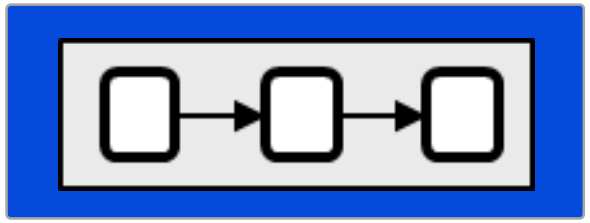
Getting Started – Tutorials and Youtube Videos





https://www.youtube.com/playlist?list=PLzpeuWUENMK3ttFsZraPRNN4XhkoS2Hte

Exploring the ACEv11 server.conf.yaml



Server.conf.yaml

- Log
- RestAdminListener
- Security
- Defaults
- Events
- Monitoring
- Statistics
- UserExits
- BrokerRegistry
- ResourceManagers
  - JVM
  - HTTPConnector
  - HTTPSConnector
  - ActivityLogManager
  - DatabaseConnectionManager
  - SocketConnectionManager
  - ContentBasedFiltering
  - FTEAgent
  - ConnectorProviders
    - SAPConnectorProvider
    - SiebelConnectorProvider
    - PeopleSoftConnectorProvider
- UserVariables

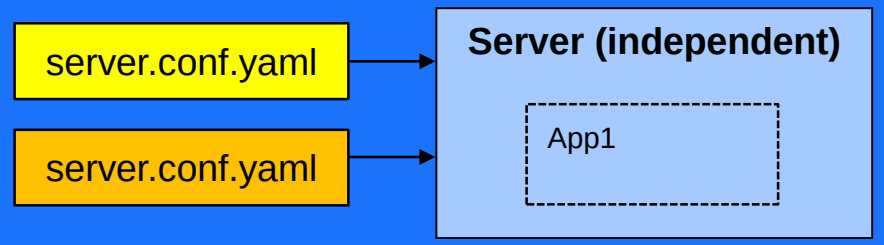
Rest

Statistics

JVM ResourceManager

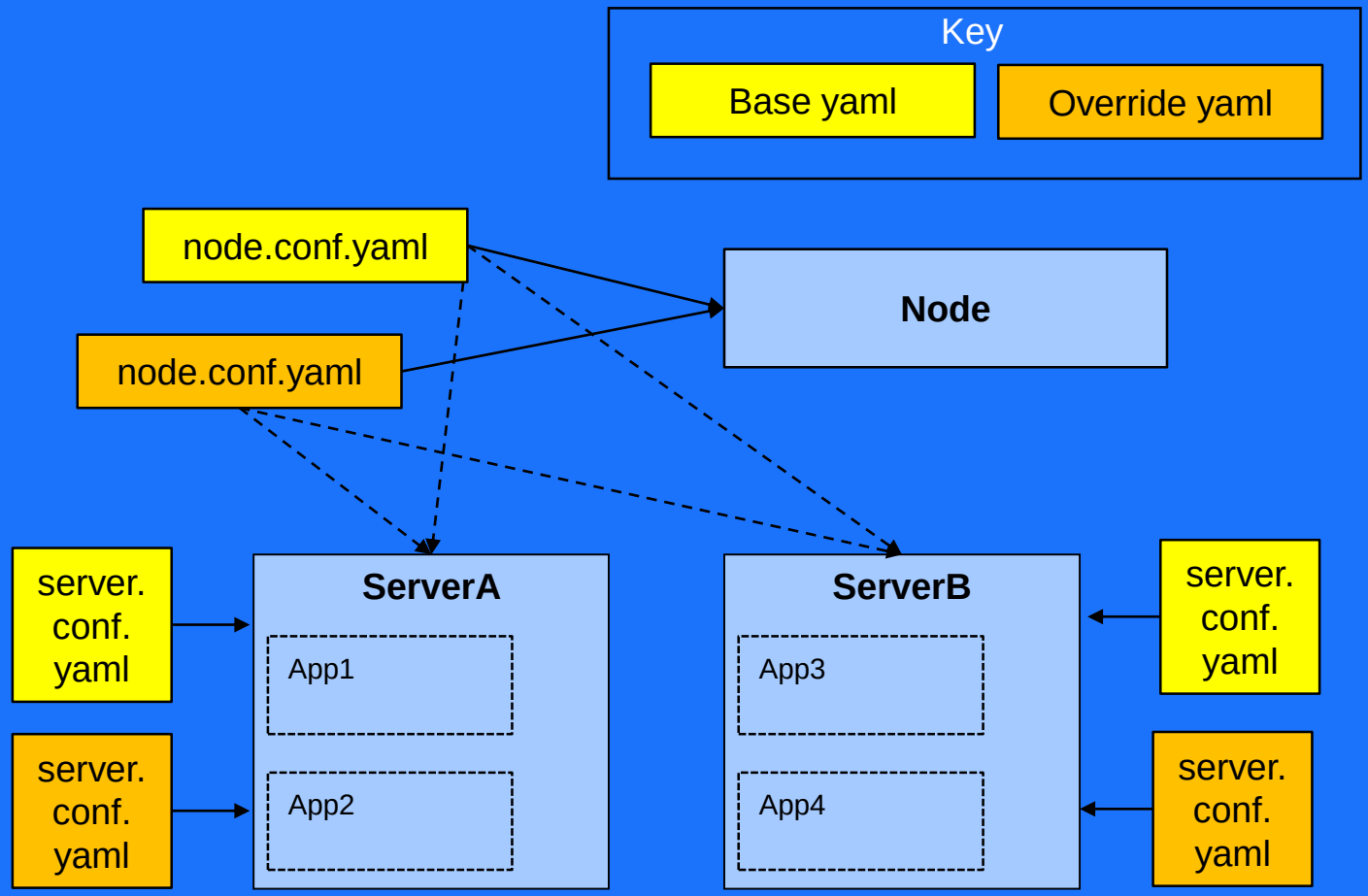
```
142  ResourceManagers:
143    JVM:
144      #jvmVerboseOption: 'none'
145      #jvmDisableClassGC: ''
146      #jvmEnableIncGC: ''
147      #jvmShareClasses: ''
148      #jvmNativeStackSize: -1
149      #jvmJavaOSStackSize: -1
150      #jvmMinHeapSize: 33554432       # minimum JVM  heap size in bytes
151      #jvmMaxHeapSize: 268435456      # maximum JVM heap size in bytes
152      #jvmDebugPort: 0            # Set non-zero to activate JVM debug port for Toolkit debugging
153      #jvmSystemProperty: ''
154      #keystoreType: ''
155      #keystoreFile: ''
156      #keystorePass: ''
157      #truststoreType: ''
158      #truststoreFile: ''
159      #truststorePass: ''
160      #crlFileList: ''
161      #enableCRLDP: ''
162      #kerberosConfigFile: ''
163      #kerberosKeytabFile: ''
```

Configuration of Servers using YAML files



- overrides/server.conf.yaml are provided so that you can maintain a "template" for behavior which can also be overriden
- Node.conf.yaml provides a limited set of node wide options
- Node-owned servers inherit settings from the node.conf.yaml
- When you create an integration node, the node.conf.yaml file is located at:

  `$MQSI_WORKPATH/components/<Node name>/node.conf.yaml`

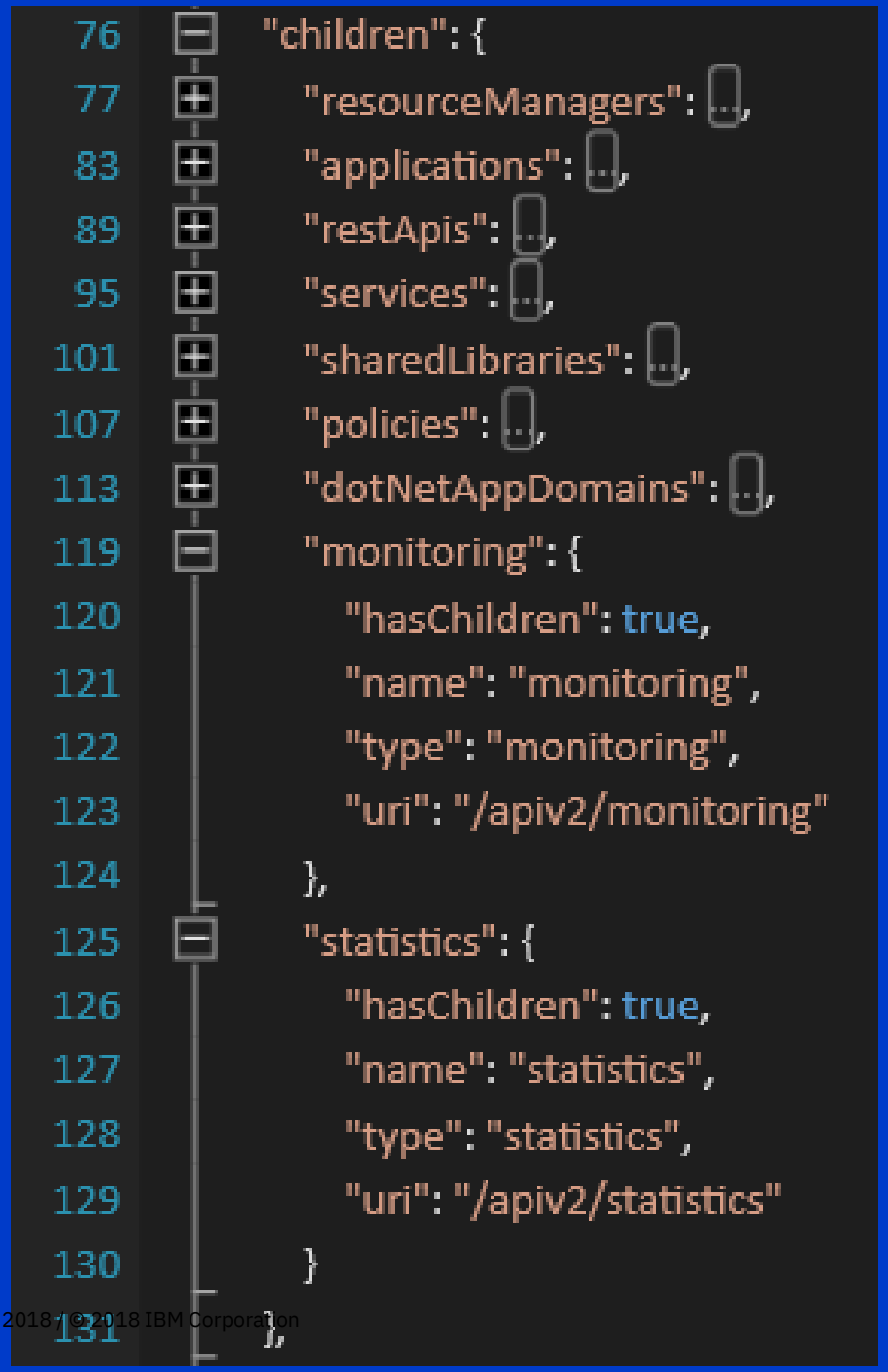


Acknowledgement: This chart is kindly brought to us courtesy of Sanjay Nagchowdhury who will be using it to great effect in A04 this afternoon

```
41    "descriptiveProperties": {
42      "buildLevel": "ib000-L181218.16552 (S000-L181218.13002)",
43      "definitionFactoryType": "ComIbmIntegrationServerResourceType",
44      "platformArchitecture": "AMD64",
45      "platformName": "Windows 10 Enterprise",
46      "platformVersion": "6.3 build 17134 ",
47      "productName": "IBM App Connect Enterprise",
48      "version": "11.0.0.3"
49    },
50    "active": {
51      "eventLog": "C:\\MyServerExample/log/integration_server.MyServer.events.txt",
52      "isRunning": true,
53      "lastMessageTime": 0,
54      "monitoring": "inactive",
55      "monitoringProfile": "",
56      "processId": 14436,
57      "startupTime": 1549973652,
58      "state": "started"
59    },
```


Basic Properties of a server which are shown in the Toolkit Integration Explorer View

http://server:port/apiv2



Each resource returns children which can help you navigate the hierarchy of the server

http://server:port/apiv2

The actions section shows currently available and unavailable actions that can be executed against the resource

http://server:port/apiv2

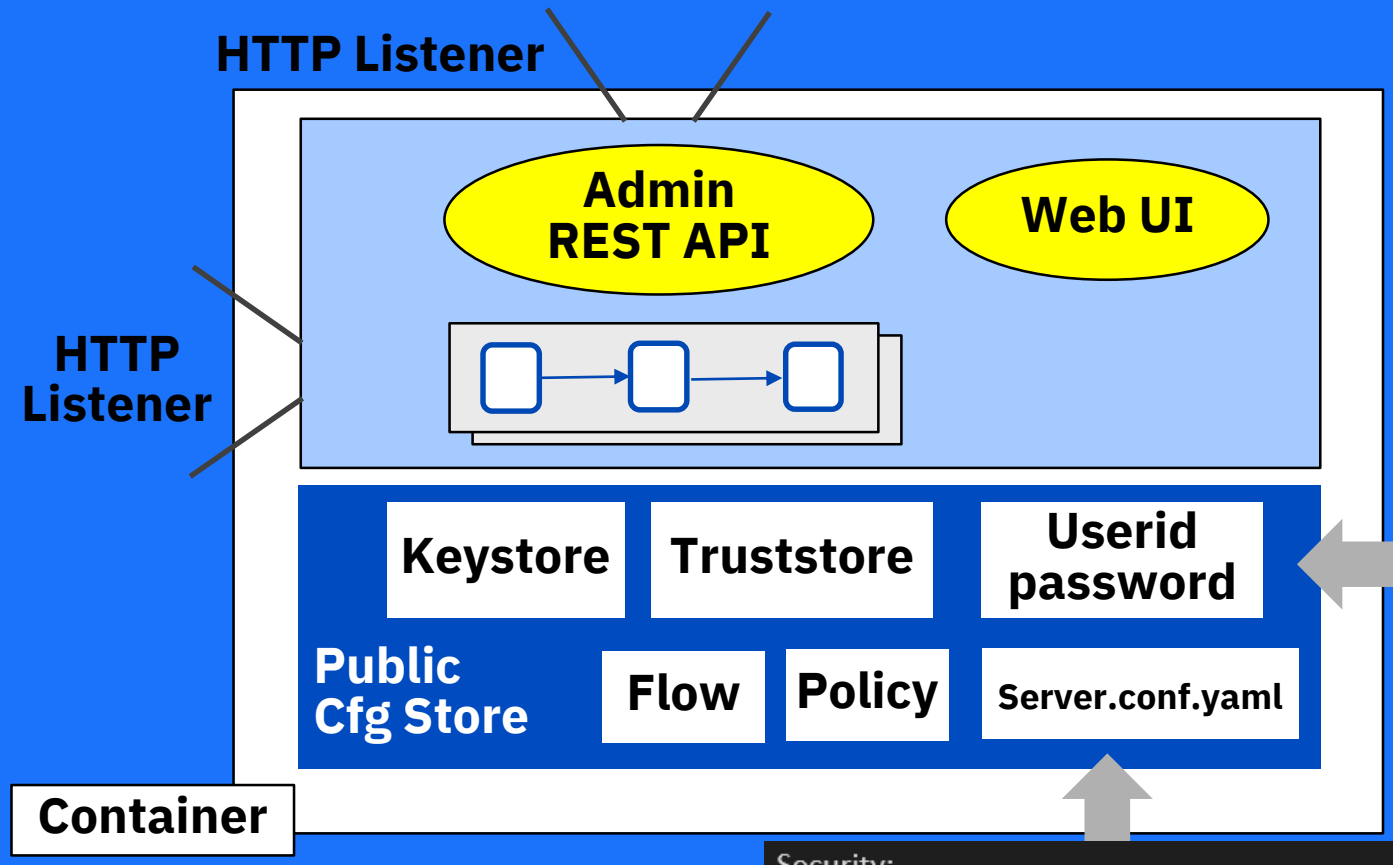

```
5    "uri": "/apiv2/policies/MyPolicyProj/policy/Policy3",
6    "properties": {
7      "allowedCiphers": "",
8      "fileFtpAccountInfo": "benthompson",
9      "fileFtpCompression": 0,
10     "fileFtpConnectionType": "PASSIVE",
11     "fileFtpDirectory": "/tmp",
12     "fileFtpScanDelay": 60,
13     "fileFtpServer": "ben.hursley.ibm.com:21",
14     "fileFtpTransferMode": "BINARY",
15     "fileFtpUser": "bensecid",
16     "knownHostsFile": "",
17     "mac": "",
18     "name": "Policy3",
19     "preserveRemoteFileDate": false,
20     "remoteTransferType": "FTP",
21     "strictHostKeyChecking": false,
22     "timeoutInterval": 0,
23     "type": "Policy"
24   },
```

http://server:port/apiv2/policies/MyPolicyProj/policy/Policy3

All deployed artifacts are identified as resources with URIs within the administrative REST API. Issuing a GET will show properties – in this case for an FTPServer policy

```
25   "descriptiveProperties": {
26     "className": "FtpServer",
27     "lastModified": "2019-02-12 12:13:25.358",
28     "locationOnDisk": "MyPolicyProj/Policy3.policyxml",
29     "policyType": "FtpServer",
30     "shortFileName": "Policy3.policyxml",
31     "size": 880
32   },
```

Authentication and Authorization

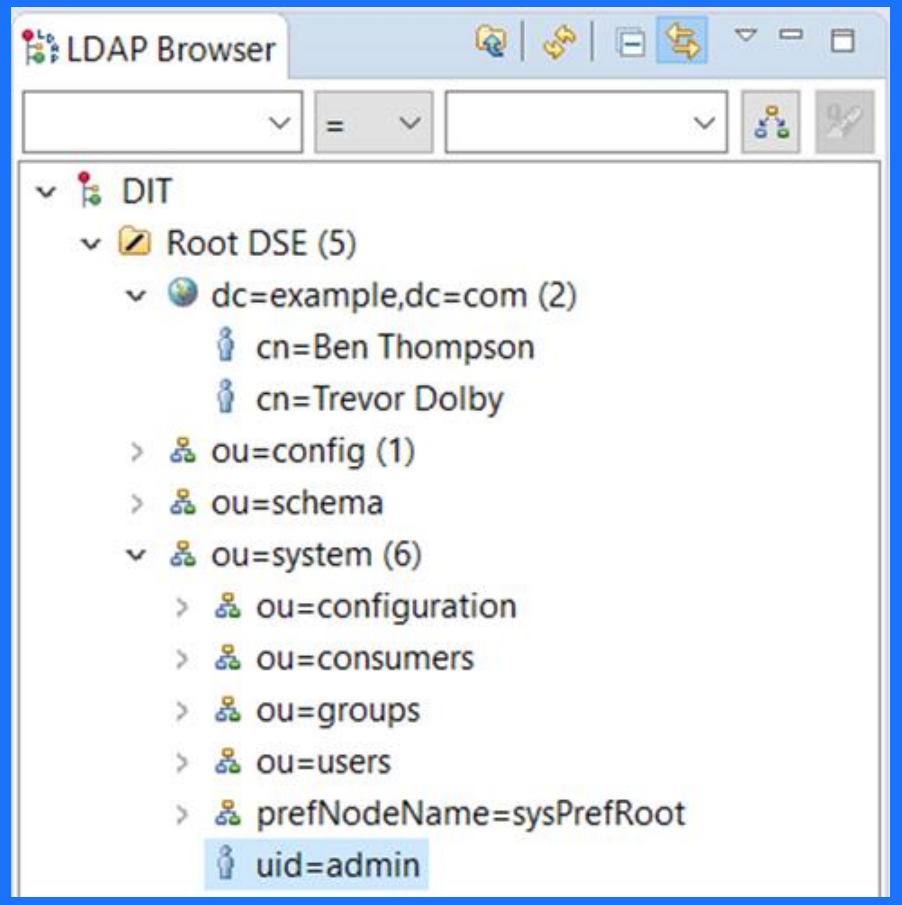


- Standalone Integration Server provides a file system store based authMode
- The mqsiwebuseradmin command is providing ACE with the user / password combinations and optionally whether role based authorization is also required.

```
mqsiwebuseradmin
        -w C:\MyServer
        -c
        -u BenWebUser
        -a BenWebPassword
        -r adminRole
```

```
Security:
  Permissions:
    # Set Admin Security Authorization file permissions by web user role using 'read+:write+:execute+' , or 'all+'
    # '+' grants permission, '-' denies permission
    # e.g. define the following web user roles 'viewRole' and 'adminRole'
    #viewRole:  'read+:write-:execute-'
    #adminRole: 'all+'
```

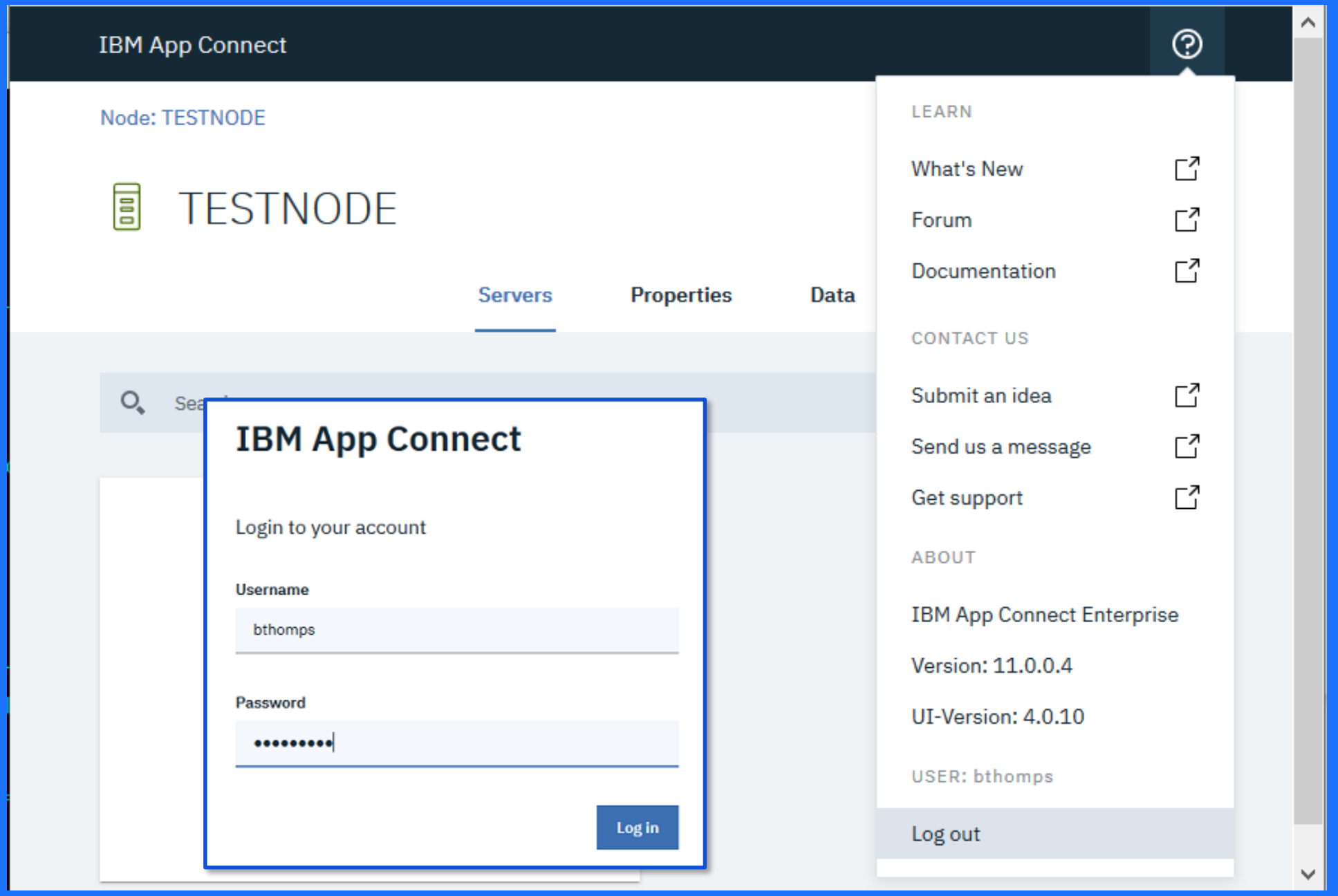
Configuring Authentication using LDAP



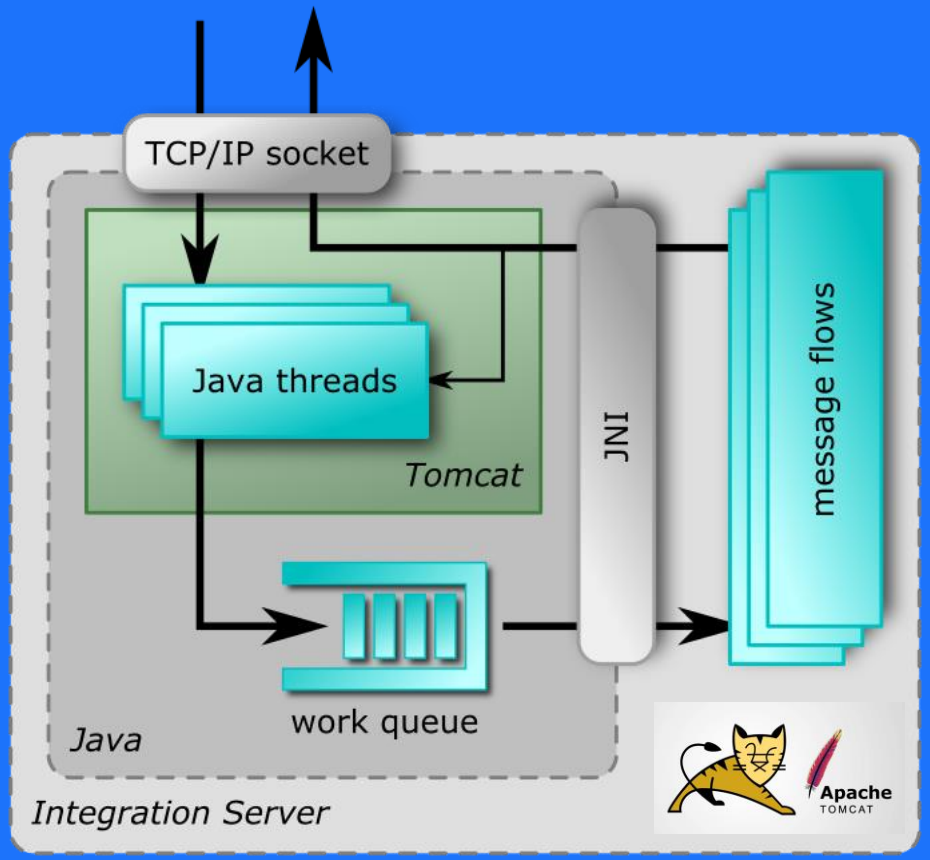

```
  # Admin Security
  #  Authentication
  basicAuth: true                                          # Clients web user na
  ldapUrl: ldap://ibmexample1:10389/dc=example,dc=com      # ldap search url
  ldapBindDn: ldap::alias                                  # Resource alias
  ldapBindPassword: ldap::alias                            # Resource alias
  #  Authorization
  adminSecurity: 'active'                    # Used to enable Authorization. Clie
  authMode: 'file'                           # Set admin authorization mode. Choo

Security:
  Node:
    Permissions:
      # Set Admin Security Authorization file permissions for the Integration N
      # '+' grants permission, '-' denies permission
      # e.g. define the following web user roles 'viewRole' and 'adminRole'
      #viewRole:  'read+:write-:execute-'
      aceadmin: 'all+'
```

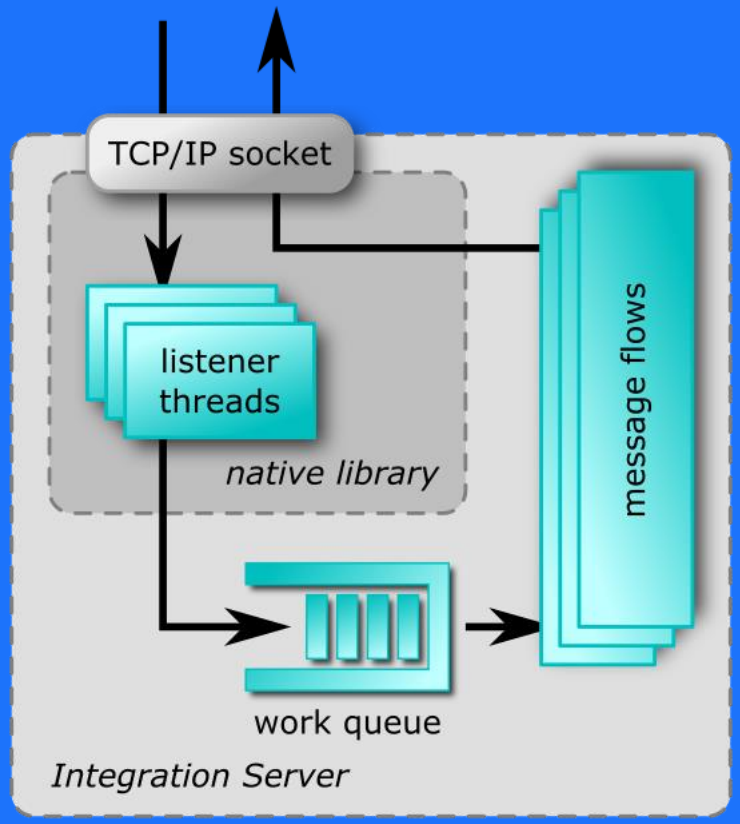
```
mqsisetdbparms TESTNODE -n ldap::alias -u "uid=admin,ou=system" -p admin123
```


IBM App Connect
Node: TESTNODE
TESTNODE
Servers
Properties
Data
LEARN
What's New
Forum
Documentation
CONTACT US
Submit an idea
Send us a message
Get support
ABOUT
IBM App Connect Enterprise
Version: 11.0.0.4
UI-Version: 4.0.10
USER: bthomps
Log out
IBM App Connect
Login to your account
Username
bthomps
Password
Log in

HTTP server I/O in IIB V10 vs. ACE V11



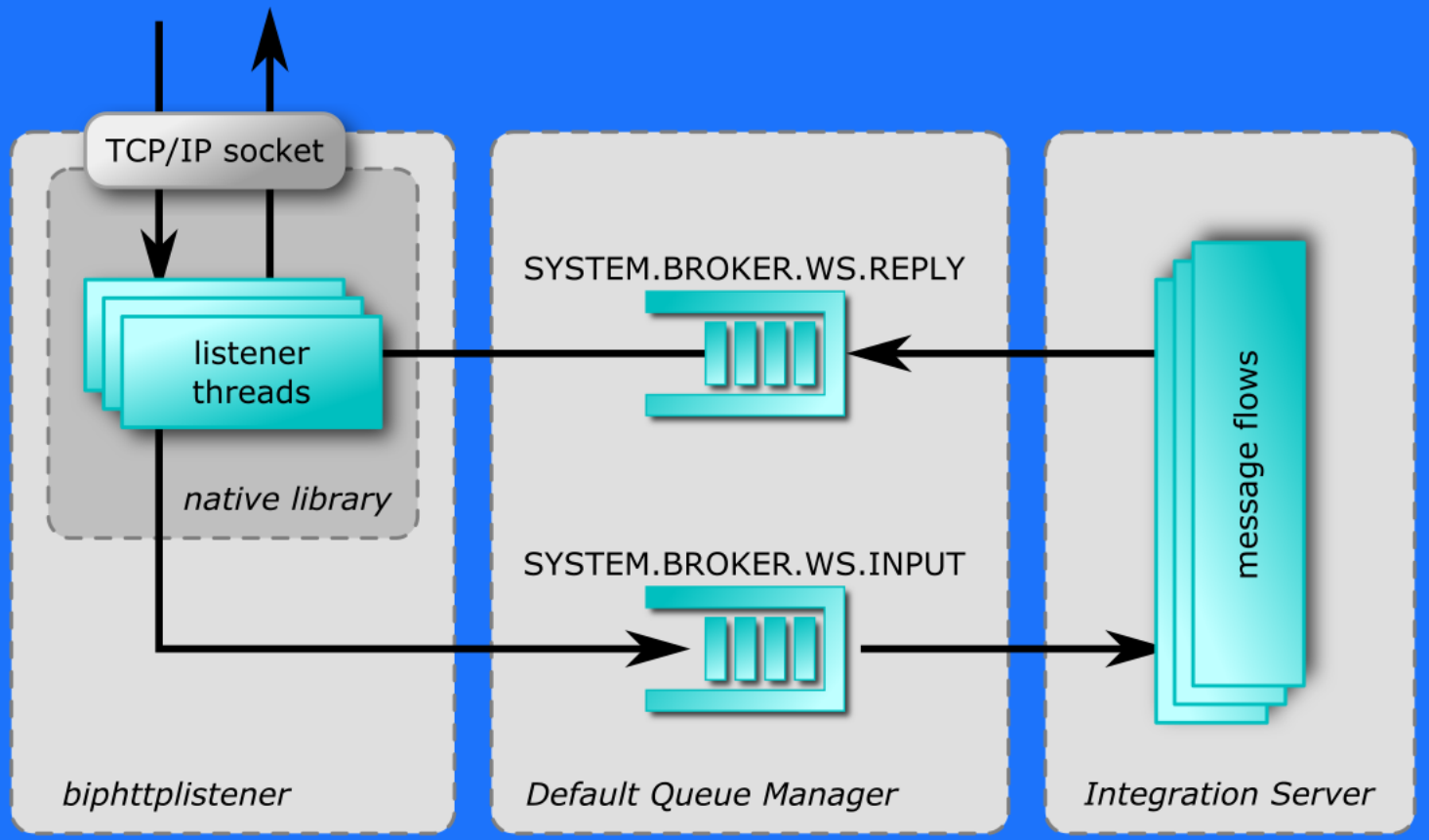
IBM Integration Bus V10



IBM App Connect Enterprise V11

Acknowledgement: This chart is kindly brought to us courtesy of David Coles who will be using it to great effect in A03 this afternoon

Integration Node Listener



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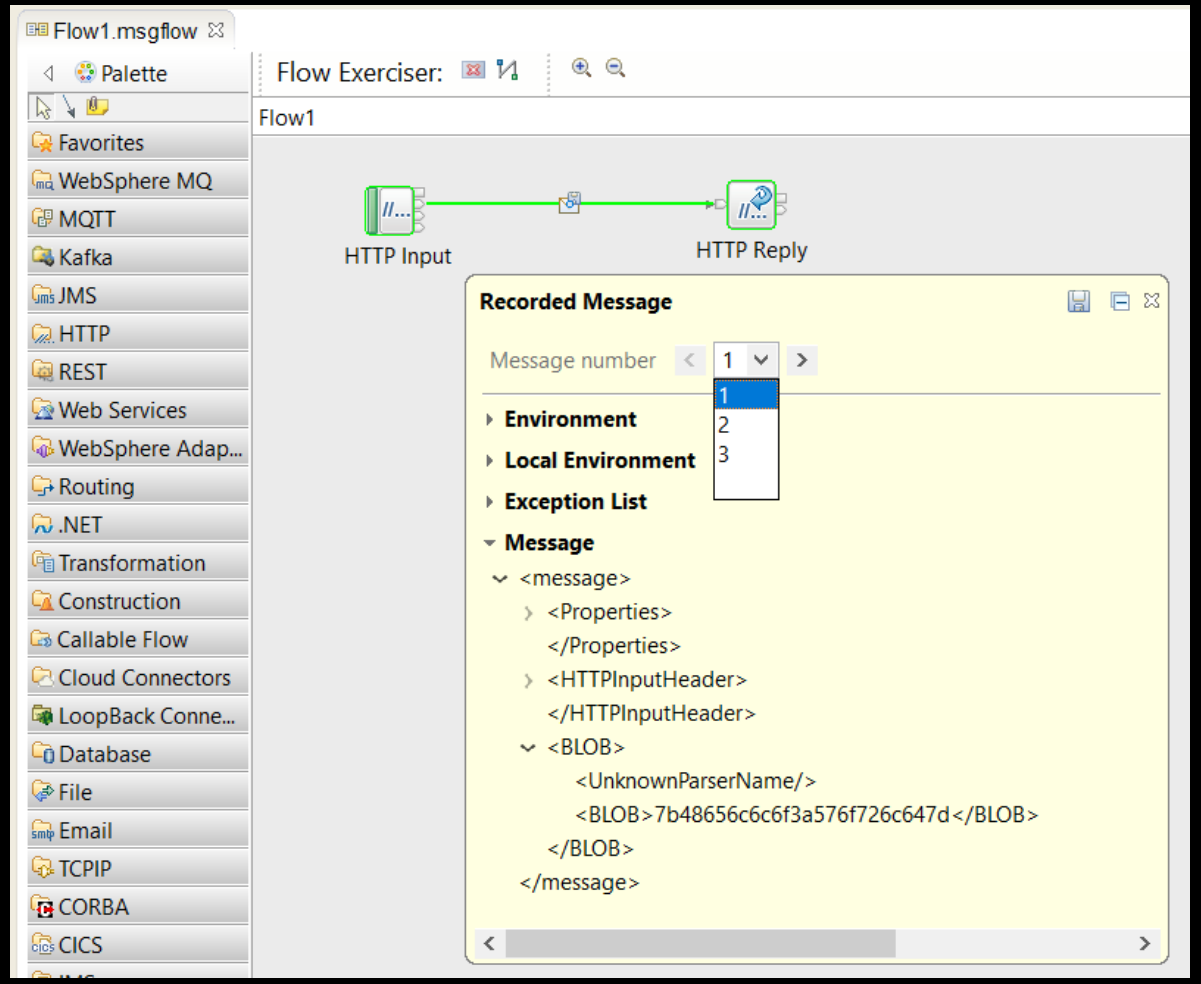
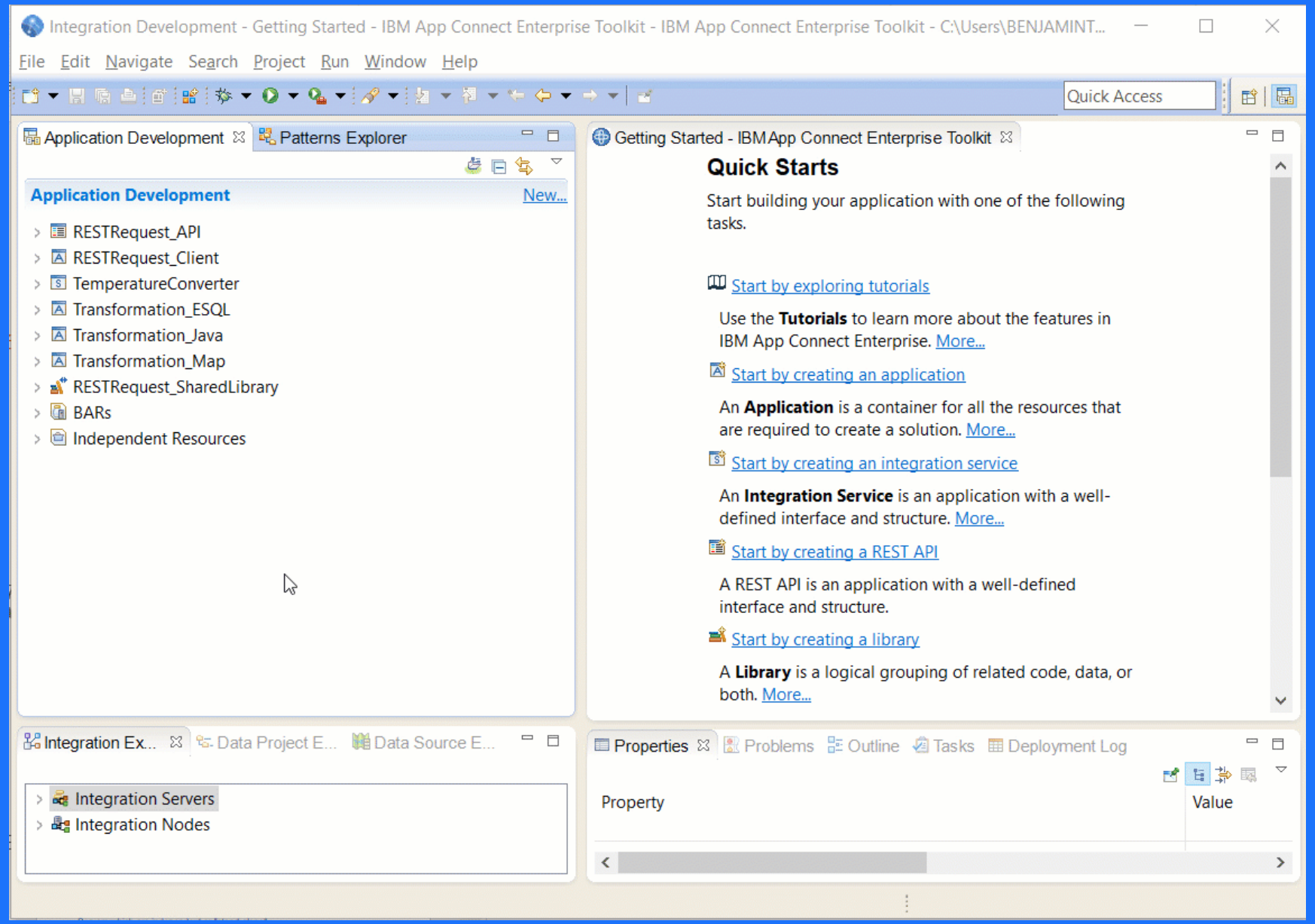
Flow Exercising and Unit Testing

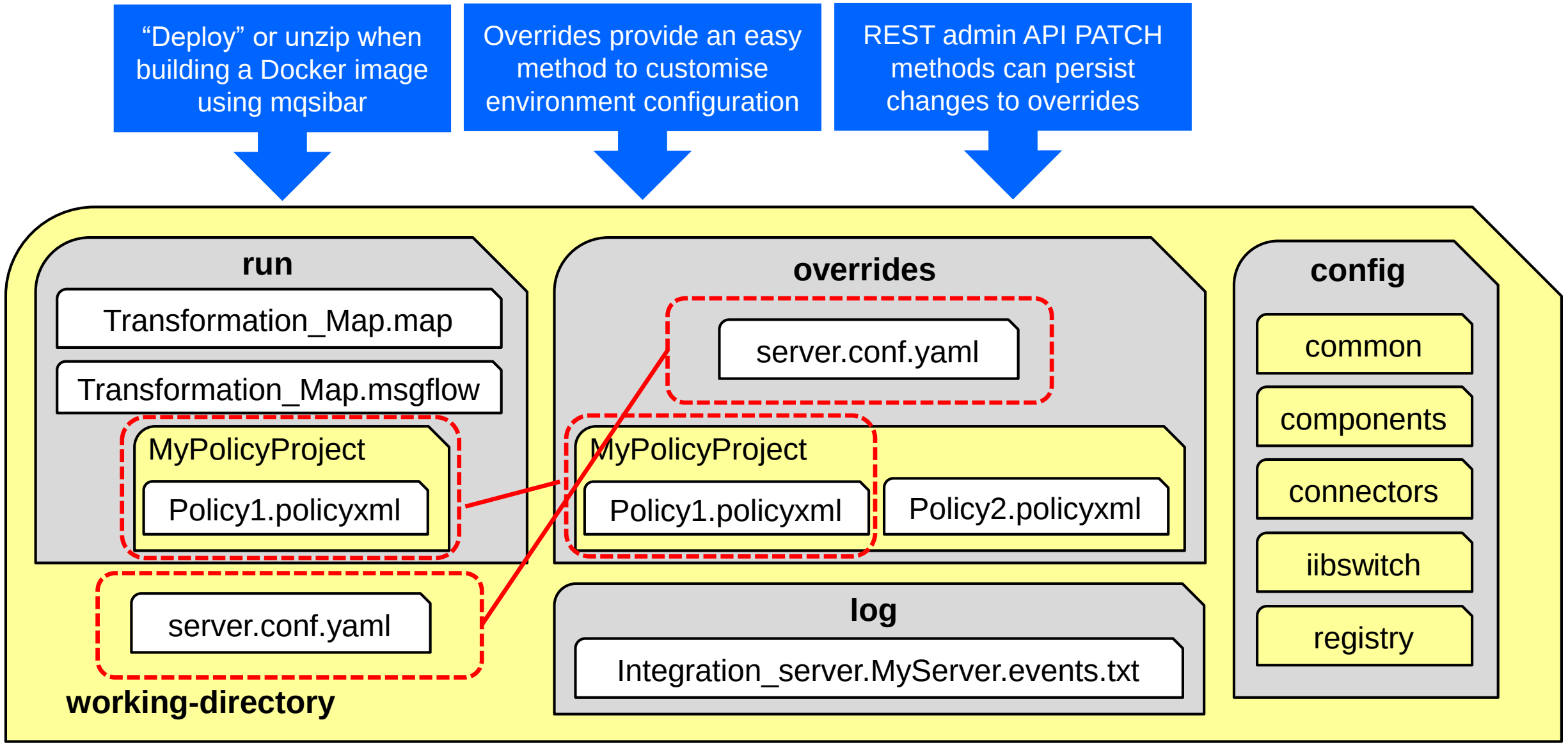
- Response now indicates if message came from an input node
- Node labels included in the response format
- Better identification of sequence information
- Correlation information for injection. Correlation between an input messages and its recorded messages
- It is now possible to identify a single message without its payload and then make a later request to get the payload for that specific message
- Better pagination options than in V10.
- The recorded message record can now be XML or JSON.
- Injection is now enabled at the Flow level instead of the server level. This means that other flows are not impacted by checking if they have injected data.
- There is now an /inject non crud action on message flows when injection mode is enabled. This makes it easy for an API to be flow-centric and removes the need to correctly identify lengthy query parameters.



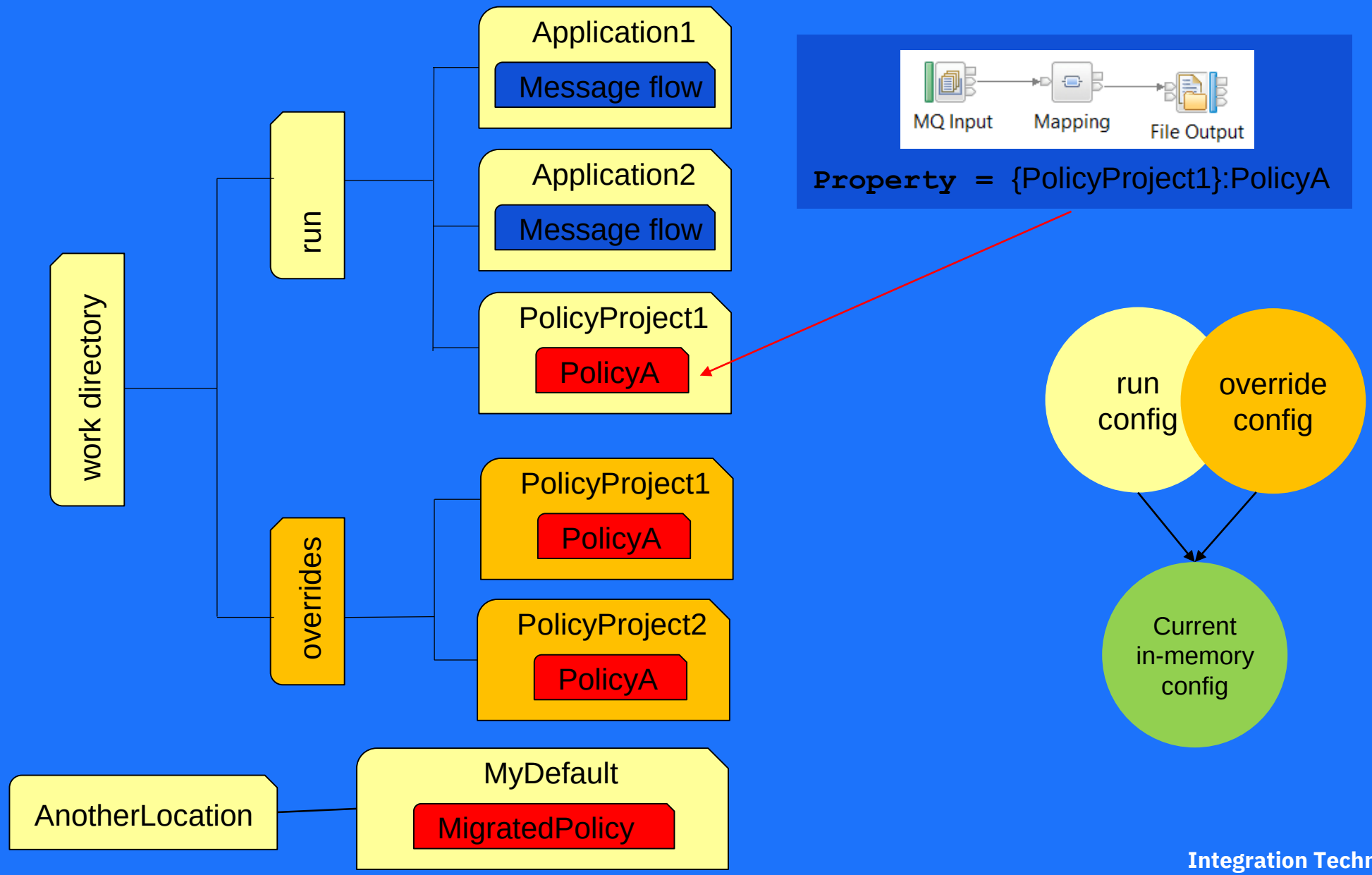
ACEv11 Policy Creation



Controlling Container Config with App Connect Enterprise



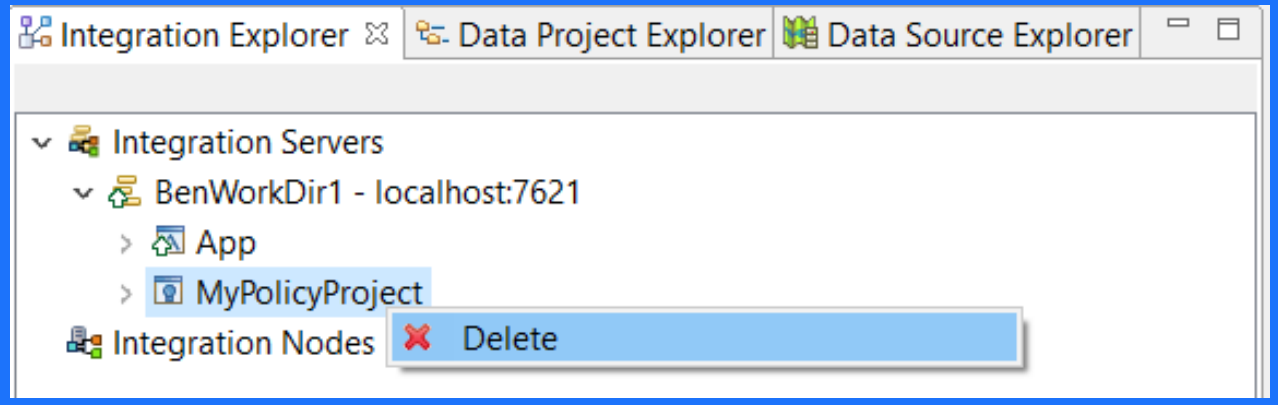
Policy and Override Behaviour

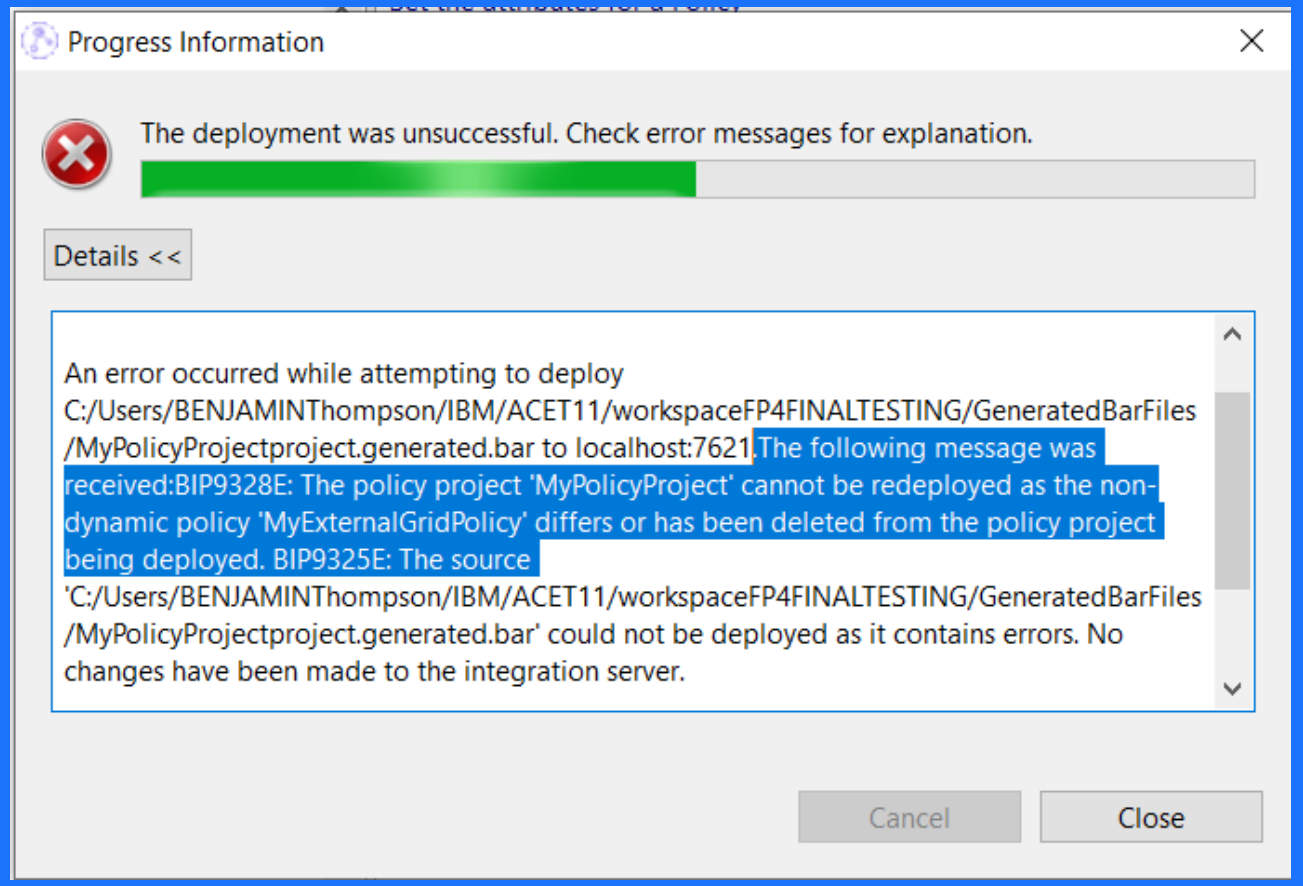


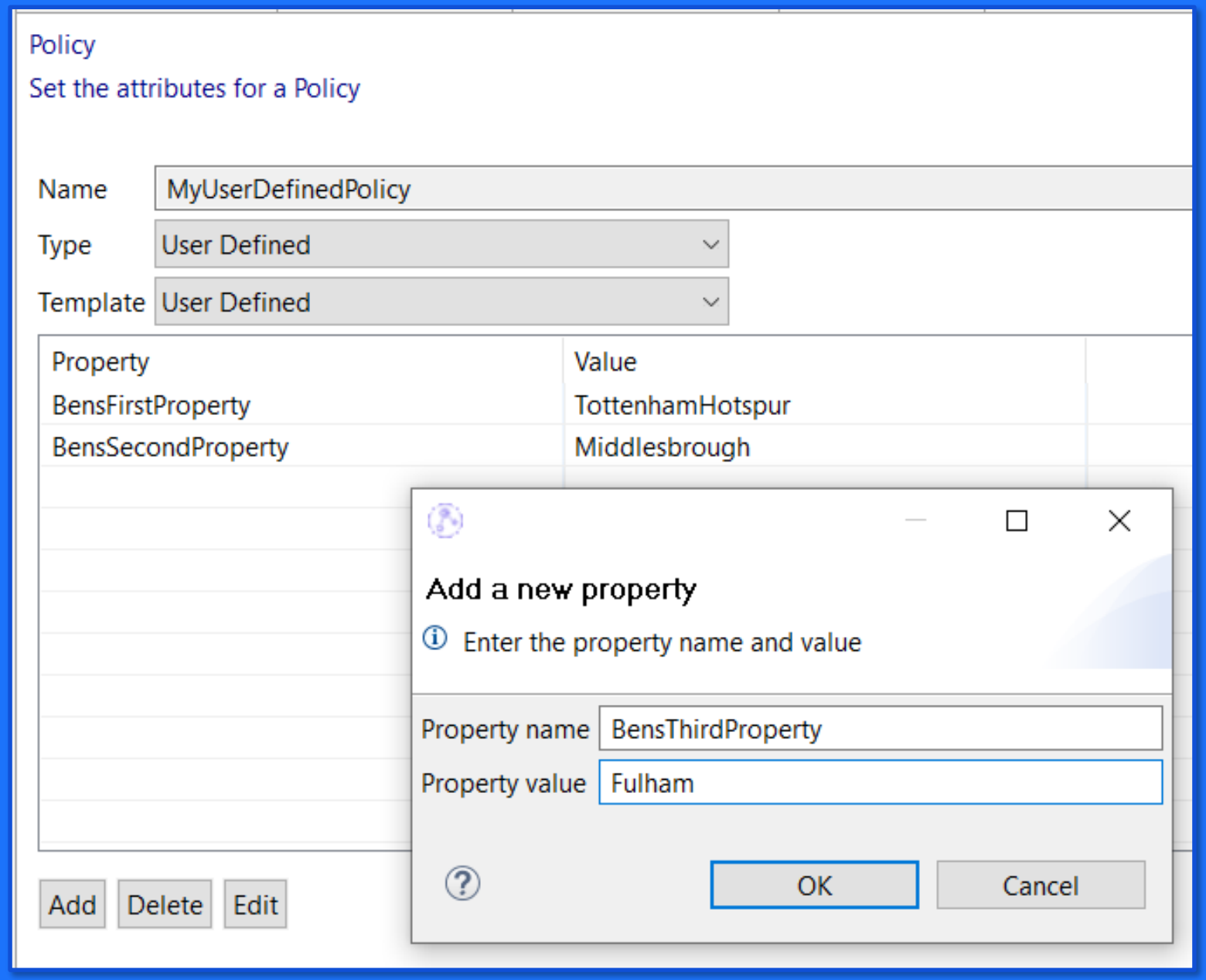
- The following policy types can be redeployed:
  - **Aggregation**
  - **CDServer**
  - **CICSConnection**
  - **Collector**
  - **EmailServer**
  - **FtpServer**
  - **Resequence**
  - **SAPConnection**
  - **SMTP**
  - **Timer**
  - **WorkloadManagement**

When you redeploy a policy project:

- All message flows using the policy are stopped and restarted.
- Other types of policy (not listed above) cannot be redeployed (yet!)
- In this situation you must delete all deployed resources from the integration server and then deploy a new version of the policy.
- If you attempt a redeploy from the Toolkit which is not allowed then you will receive an error as shown






Policy
Set the attributes for a Policy
Name
MyUserDefinedPolicy
Type
User Defined
Template
User Defined
Property
Value
BensFirstProperty
TottenhamHotspur
BensSecondProperty
Middlesbrough
Add
Delete
Edit
Add a new property
Enter the property name and value
Property name
BensThirdProperty
Property value
Fulham
OK
Cancel

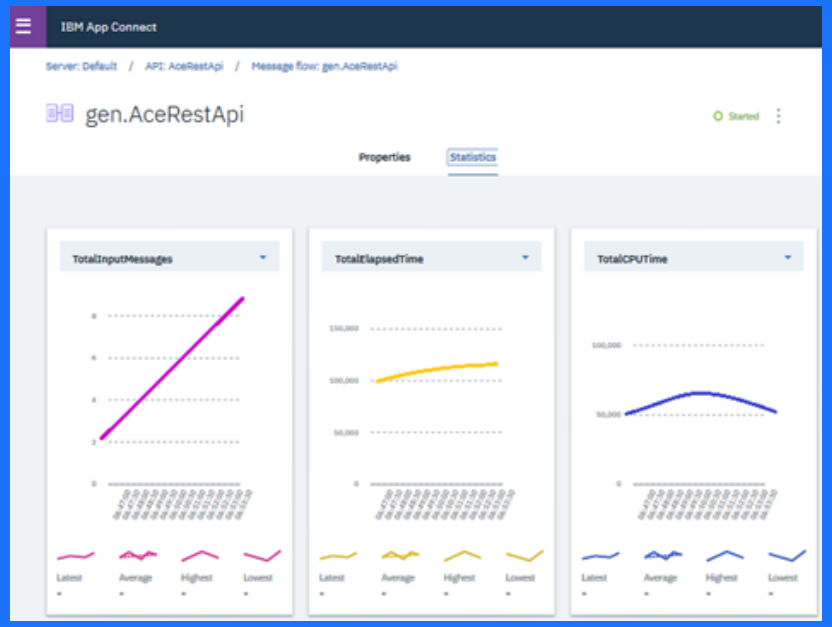
Accessing Policy Information in a Flow at Runtime

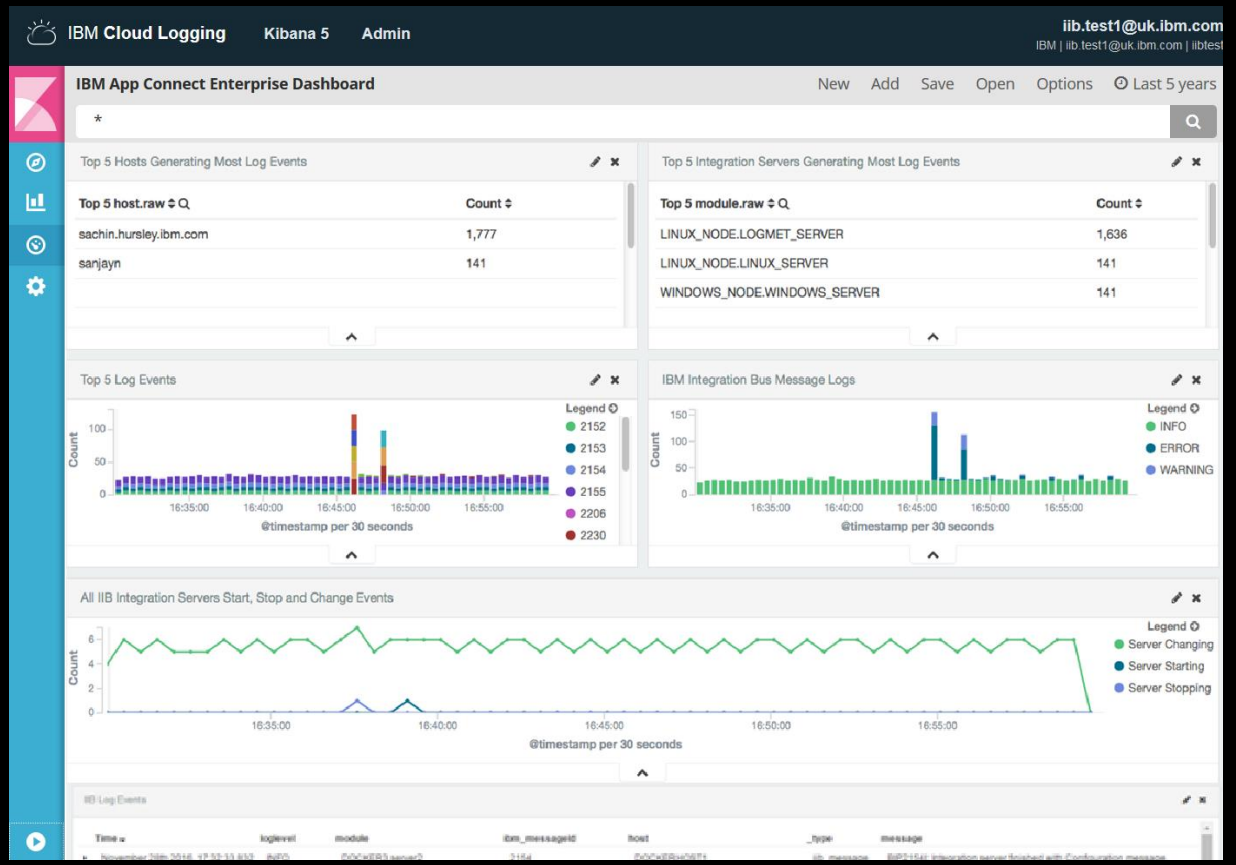
```
MbElement outRoot = outMessage.getRootElement();
MbElement outBody = outRoot.createElementAsLastChild(MbXMLNSC.PARSER_NAME);
MbElement userpolicy = outBody.createElementAsFirstChild(MbElement.TYPE_NAME_VALUE,
                       "ExamplePropertiesJava", null);
MbPolicy myPol = MbPolicy.getPolicy("UserDefined","{MyUserDefinedPolicyProject}:MyUserDefinedPolicy");
  for (String propertyName : myPol.getProperties())
    userpolicy.createElementAsLastChild( MbElement.TYPE_NAME_VALUE,
                                         propertyName,
                                         myPol.getPropertyValueAsString(propertyName) );
```

- App Connect Enterprise v11 Toolkit lets you create Policies inside Policy Projects
- Policies are used to control:
  - Connection properties
  - Operational properties which are required by the ACE runtime.
- A policy can be used by an administrator to override or abstract property values. For example sensitive data which might differ between runtime environments such as Dev / Test / Production
- Policies can be deployed to the ACE runtime in a Broker Archive (BAR) file.
- In addition to the built-in message flow nodes use of policies, users can also write their own code as part of a flow to access policy information to drive flow behaviour
- Policies of type “user defined”, can contain properties and values of the user’s choice. The equivalent capability in IBM Integration Bus was offered by user-defined configurable services.

Flow Statistics, Resource Statistics and Event Logs

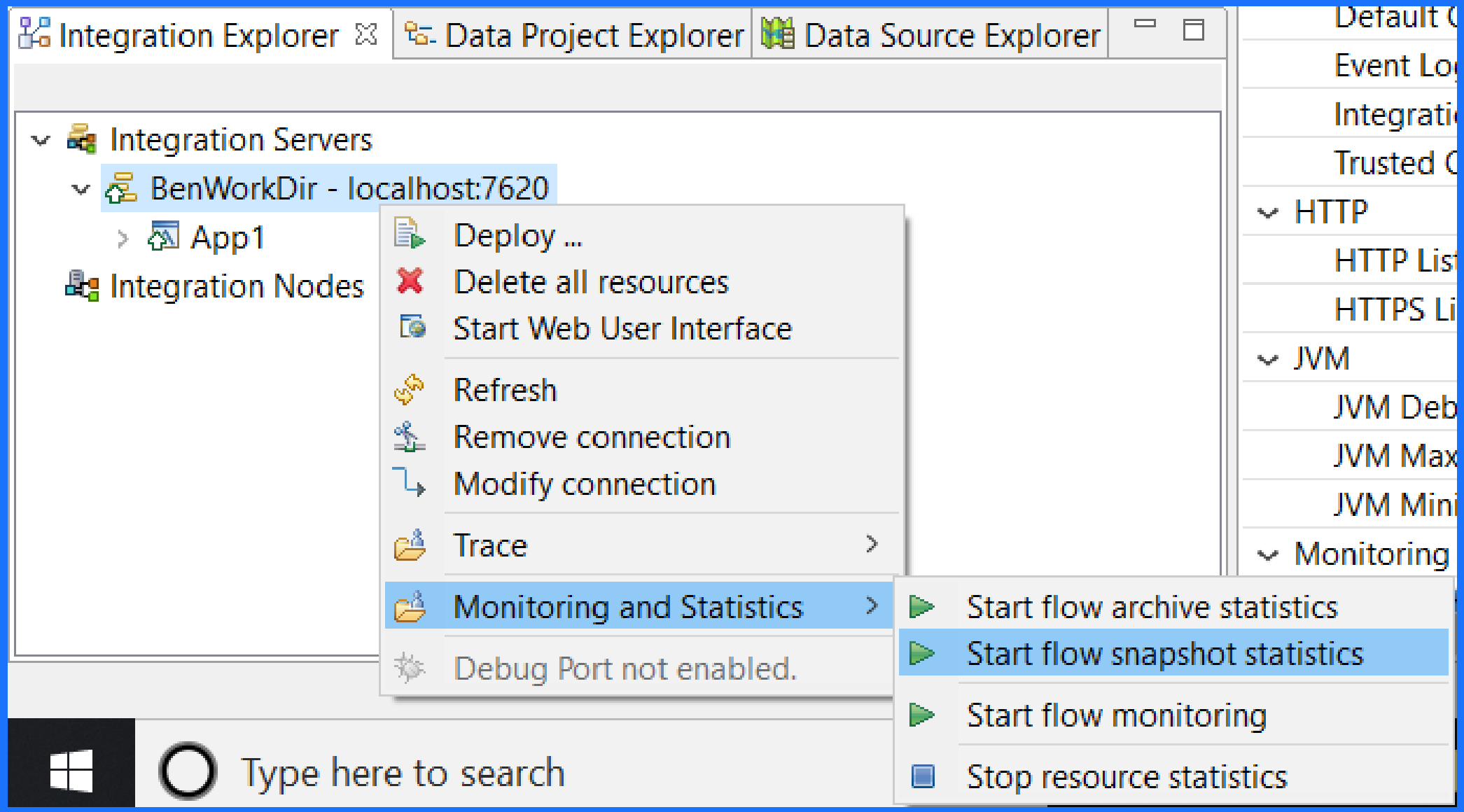
- “BIP” Informational, Warning and Error messages are issued to notify operational status and changes
- Standalone servers by default log to rotating log files <workdir>/log/integration_server.<name>.events.txt[.<n>] Override via server.conf.yaml ‘eventLog’
- To stdout, --console-log





Tail - C:\temp\acesis\log\integration_server.ACESIS.events.txt]

```
2018-06-15 10:04:01.055445: [Thread 6708] (Msg 1/1) BIP1990I: Integration server 'ACESIS' starting initialization; version '11.0.0.0' (64-bit)
2018-06-15 10:04:31.278658: [Thread 6708] (Msg 1/1) BIP1991I: Integration server has finished initialization.
2018-06-15 10:04:31.294814: [Thread 4940] (Msg 1/1) BIP3132I: The HTTP Listener has started listening on port '7600' for 'http' connections.
2018-06-15 10:06:29.957310: [Thread 10012] (Msg 1/1) BIP2152I: Configuration message received.
2018-06-15 10:06:30.237802: [Thread 10012] (Msg 1/1) BIP2155I: About to 'Initialize' the deployed resource 'AceRestApi' of type 'RestAPI'.
2018-06-15 10:06:35.847336: [Thread 10012] (Msg 1/1) BIP2155I: About to 'Start' the deployed resource 'AceRestApi' of type 'RestAPI'.
2018-06-15 10:06:35.881628: [Thread 10012] (Msg 1/1) BIP3132I: The HTTP Listener has started listening on port '7800' for 'http' connections.
2018-06-15 10:06:35.885008: [Thread 10012] (Msg 1/1) BIP1996I: Listening on HTTP URL '/acerestapi/v1*'.
```


Integration Explorer
Data Project Explorer
Data Source Explorer
Integration Servers
BenWorkDir - localhost:7620
App1
Integration Nodes
Deploy ...
Delete all resources
Start Web User Interface
Refresh
Remove connection
Modify connection
Trace
Monitoring and Statistics
Debug Port not enabled.
Start flow archive statistics
Start flow snapshot statistics
Start flow monitoring
Stop resource statistics
HTTP
JVM
Monitoring
Type here to search

```
{
  "hasChildren": false,
  "name": "snapshot",
  "type": "snapshot",
  "uri": "/apiv2/statistics/snapshot",
  "properties": {
    "accountingOrigin": "inherit",
    "name": "Snapshot",
    "nodeDataLevel": "inherit",
    "outputFormat": "inherit",
    "publicationOn": "inherit",
    "threadDataLevel": "inherit",
    "type": "Snapshot"
  },
  "descriptiveProperties": {},
  "active": {
    "accountingOrigin": "none",
    "nodeDataLevel": "none",
    "outputFormat": "usertrace",
    "publicationOn": "inactive",
    "threadDataLevel": "none"
  },
  "actions": {
    "available": {
      "start-collection": "/apiv2/statistics/snapshot/start-collection"
    },
    "unavailable": {
      "stop-collection": "/apiv2/statistics/snapshot/stop-collection"
    }
  },
  "children": {},
  "links": []
}
```


“Configured”

“Active”

- mqsichangeflowstats is now persisted (sticky) by default
- A new --non-persist option preserves old behaviour if desired
- mqsireportflowstats mirrors the same options
- Note the 2 line Active / Configured reporting layout shown on the next chart
- There is also a verbose option to show thread level and accounting origin

BEFORE

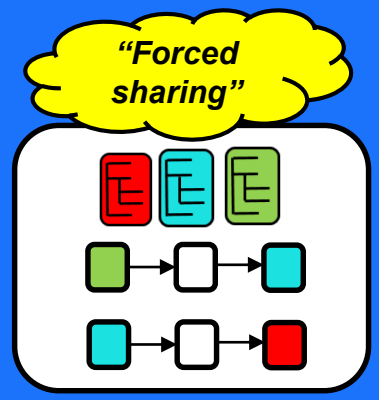
```
C:\Program Files\IBM\ACE\11.0.0.4>mqsireportflowstats GREATWOLF -e default  --snapshot --all-applications --all-flows
BIP15077I: Integration Server default Snapshot Active     state='inactive', nodeDataLevels='none', outputFormat='usertrace'
BIP15079I: Integration Server default Snapshot Configured state='inherit', nodeDataLevels='inherit', outputFormat='inherit'
BIP15077I:   Application EDIFACT_Example Snapshot Active     state='inactive', nodeDataLevels='none', outputFormat='usertrace'
BIP15079I:   Application EDIFACT_Example Snapshot Configured state='inherit', nodeDataLevels='inherit', outputFormat='inherit'
BIP15077I:     MessageFlow EDIFACT_Example Snapshot Active     state='inactive', nodeDataLevels='none', outputFormat='usertrace'
BIP15079I:     MessageFlow EDIFACT_Example Snapshot Configured state='inherit', nodeDataLevels='inherit', outputFormat='inherit'

BIP8071I: Successful command completion.
```

```
mqsichangeflowstats GREATWOLF -e default  --snapshot
--all-applications --all-flows   --control active --output-format csv
```

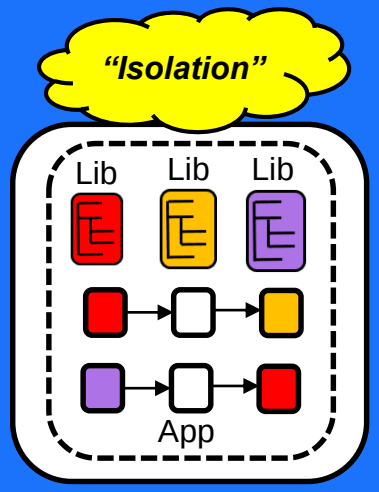
```
C:\Program Files\IBM\ACE\11.0.0.4>mqsireportflowstats GREATWOLF -e default  --snapshot --all-applications --all-flows
BIP15077I: Integration Server default Snapshot Active     state='inactive', nodeDataLevels='none', outputFormat='usertrace'
BIP15079I: Integration Server default Snapshot Configured state='inherit', nodeDataLevels='inherit', outputFormat='inherit'
BIP15077I:   Application EDIFACT_Example Snapshot Active     state='inactive', nodeDataLevels='none', outputFormat='usertrace'
BIP15079I:   Application EDIFACT_Example Snapshot Configured state='inherit', nodeDataLevels='inherit', outputFormat='inherit'
BIP15077I:     MessageFlow EDIFACT_Example Snapshot Active     state='active', nodeDataLevels='none', outputFormat='csv,usertrace'
BIP15079I:     MessageFlow EDIFACT_Example Snapshot Configured state='active', nodeDataLevels='inherit', outputFormat='csv'

BIP8071I: Successful command completion.
```

AFTER

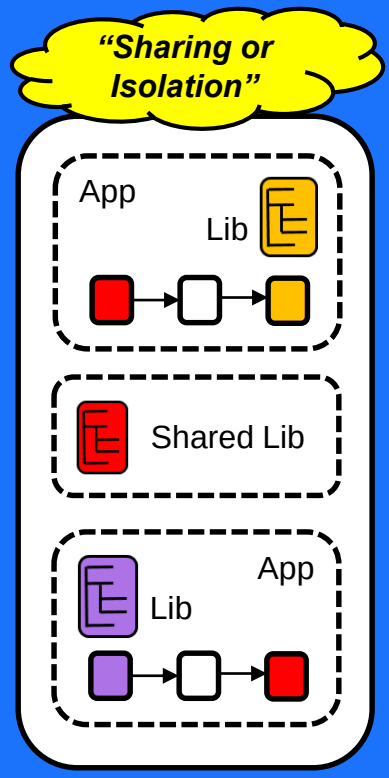
Default Application Deployment Behaviours



WMBv7
"Broker Projects"

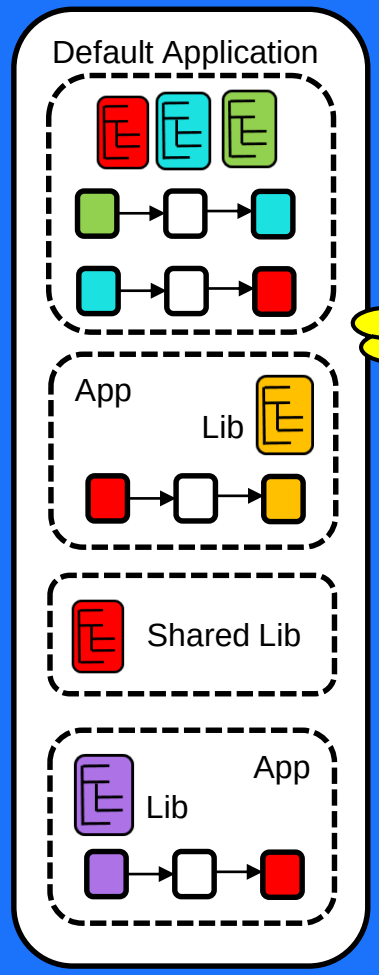


WMBv8, IIBv9
"Applications and Libraries"



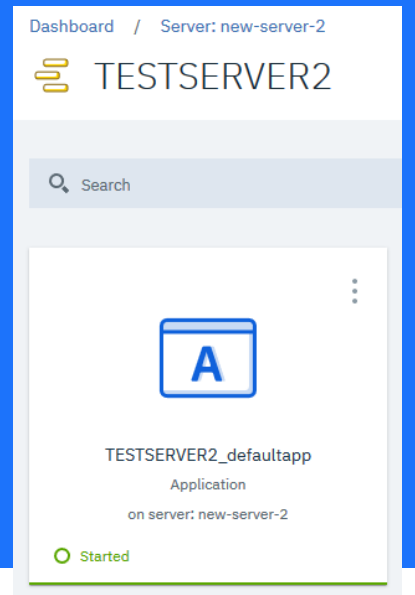
IIBv10
"Shared Libraries"

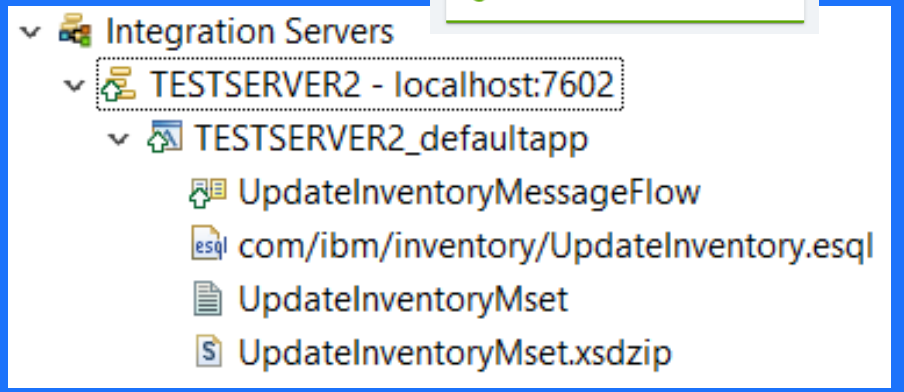
```
C:\>IntegrationServer --name TESTSERVER --work-dir C:\TESTSERVER --admin-rest-api 7602
  --default-application-name TESTSERVER_defaultapp
```



ACEv11

"Default Application"

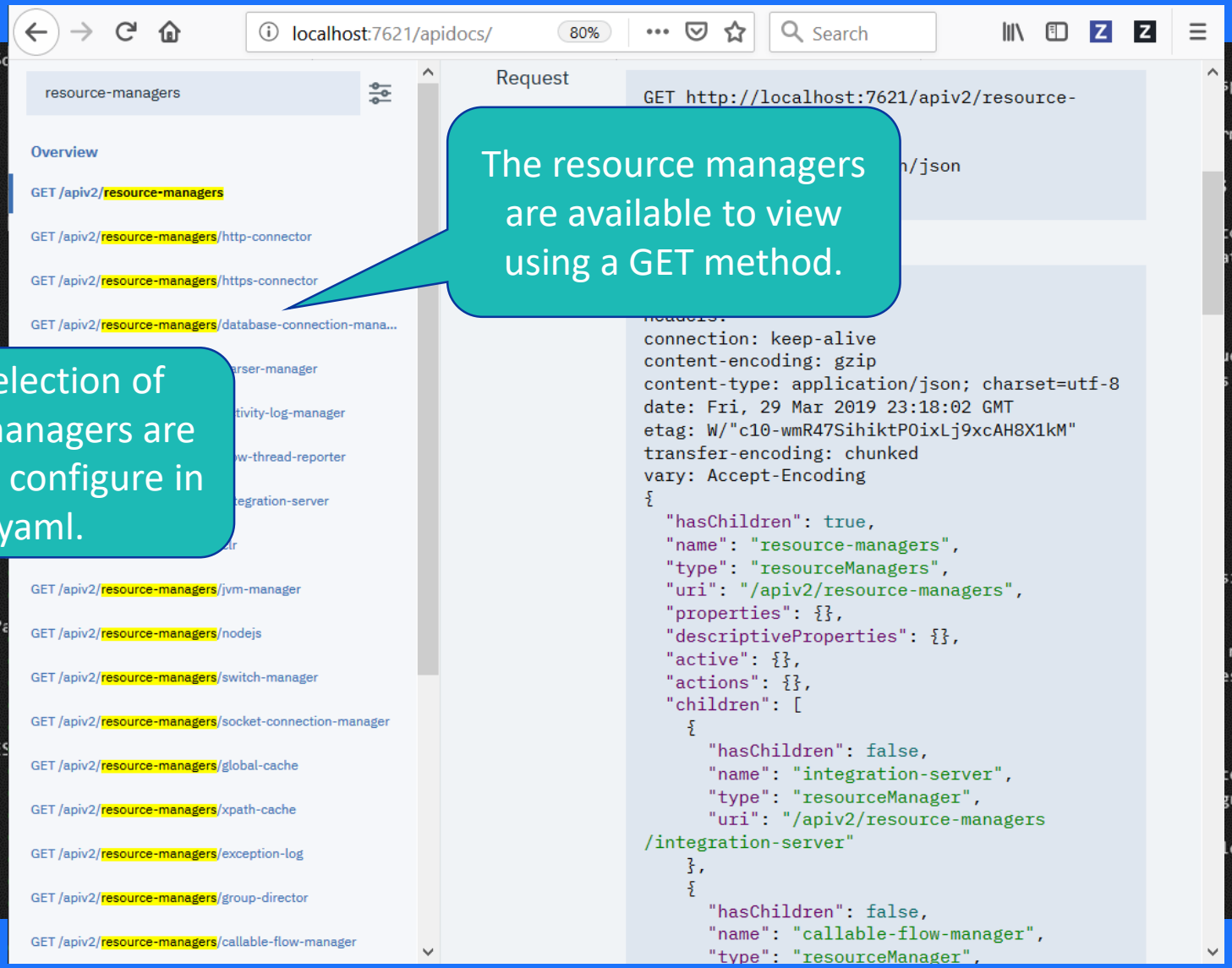




Resource Managers

- ResourceManagers
  - JVM
  - HTTPConnector
  - HTTPSConnector
  - ActivityLogManager
  - DatabaseConnectionManager
  - SocketConnectionManager
  - ContentBasedFiltering
  - FTEAgent
  - **ParserManager**
  - **ESQL**
  - **XMLNSC**
  - **JSON**
  - **MQConnectionManager**
  - **XPathCache**
  - **AsyncHandleManager**
  - **GlobalCache**
  - **ExceptionLog**
  - ConnectorProviders
    - SAPConnectorProvider
    - SiebelConnectorProvider
    - PeopleSoftConnectorProvider

A large selection of resource managers are available to configure in the yaml.



Integration

Explore the new features in App Connect Enterprise version 11.0.0.4

0

BenThompsonIBM
Published on March 30, 2019

We're thrilled to announce the availability of IBM App Connect Enterprise v11.0.0.4. This is the fourth fix pack released for App Connect Enterprise software. We provide regular fix packs, approximately once per quarter, a cadence which we intend to continue through 2019. Fix packs provide both regular maintenance for the product, and also new functional content. This blog post summarizes all the latest and greatest capabilities:

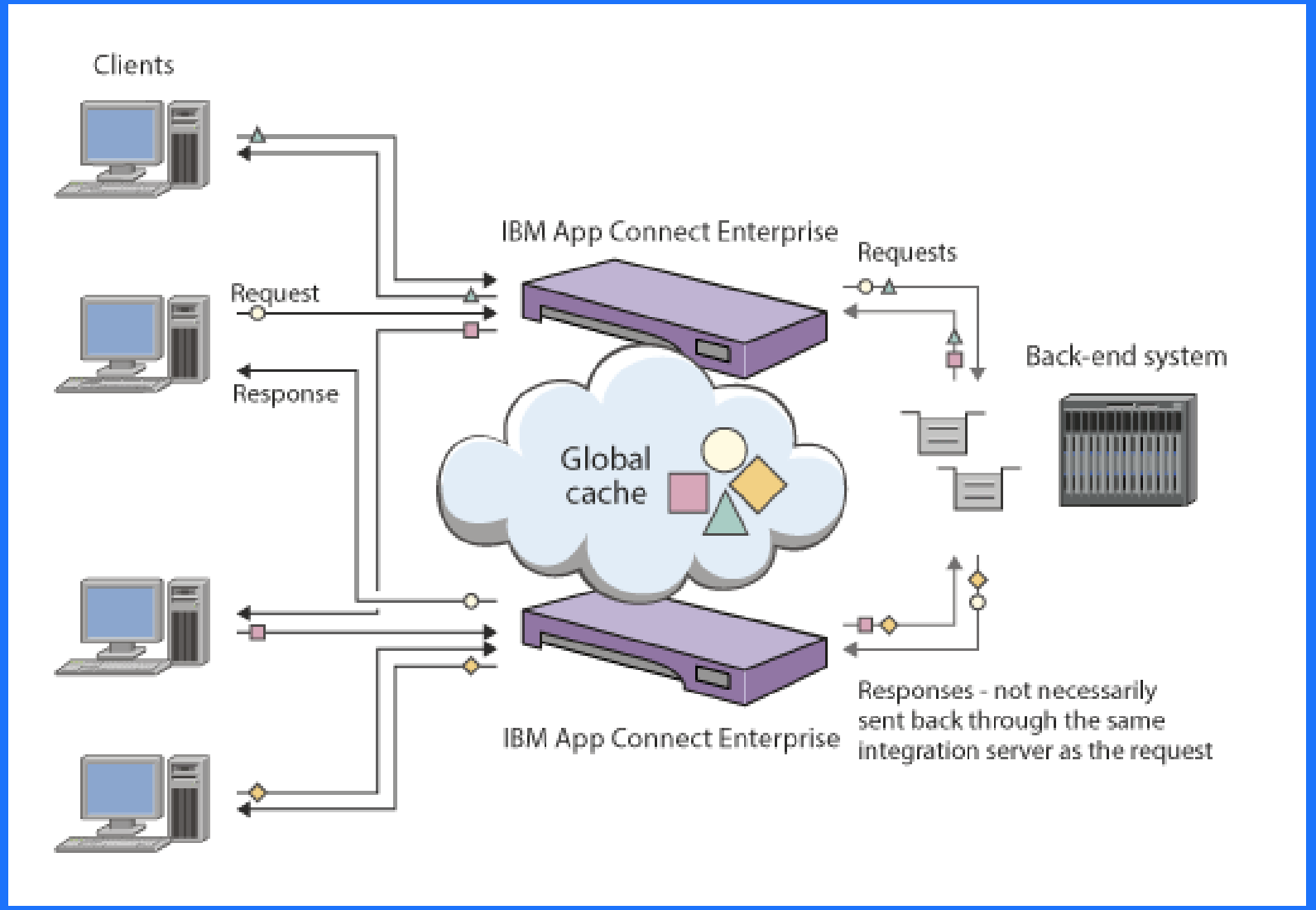
- LDAP Authentication for ACE Administration
- Global Cache
- Record and Replay
- Policy Redeploy
- Sticky settings for Monitoring and Statistics including REST API PATCH verbs
- Support for zLinux
- Toolkit Enhancements including an editor for user defined policies
- New Resource Manager settings
- The new Exception Log Resource Manager

Tags

ACE ACE on Cloud tutorial administration ais-op api API Connect API Management APIs App Connect badge App Connect Enterprise App Connect Enterprise v11 App Connect tutorial betaworks broker BTM cast iron chef cloud configuration develop-integration-solution development dfdl docker docs documentation ESQL festive2015 gdm get-started global-cache graphical-data-mapping healthcare-integration HTTP hybrid integration ibm-application-integration ibm-integration ibm-integration-bus ibm-integration-bus-manufacturing-pack ibm-integration-bus-on-cloud ibm-integration-community ibm-mq IBM App Connect (IBM Cloud) IBM App Connect Enterprise IBM App Connect Professional IBM Cloud IBM Cloud Private iib iib10 iib10lab iiboc iibv9 iibv10 IIBv10.0.0.4 integration integration-design-and-architecture integration-solution Integration Bus interconnect lightweight-integration LoopBack manufacturing manufacturing-pack microservices

https://developer.ibm.com/integration/blog/2019/03/30/explore-the-new-features-in-app-connect-enterprise-version-11-0-0-4/

Introduction to the Global Cache



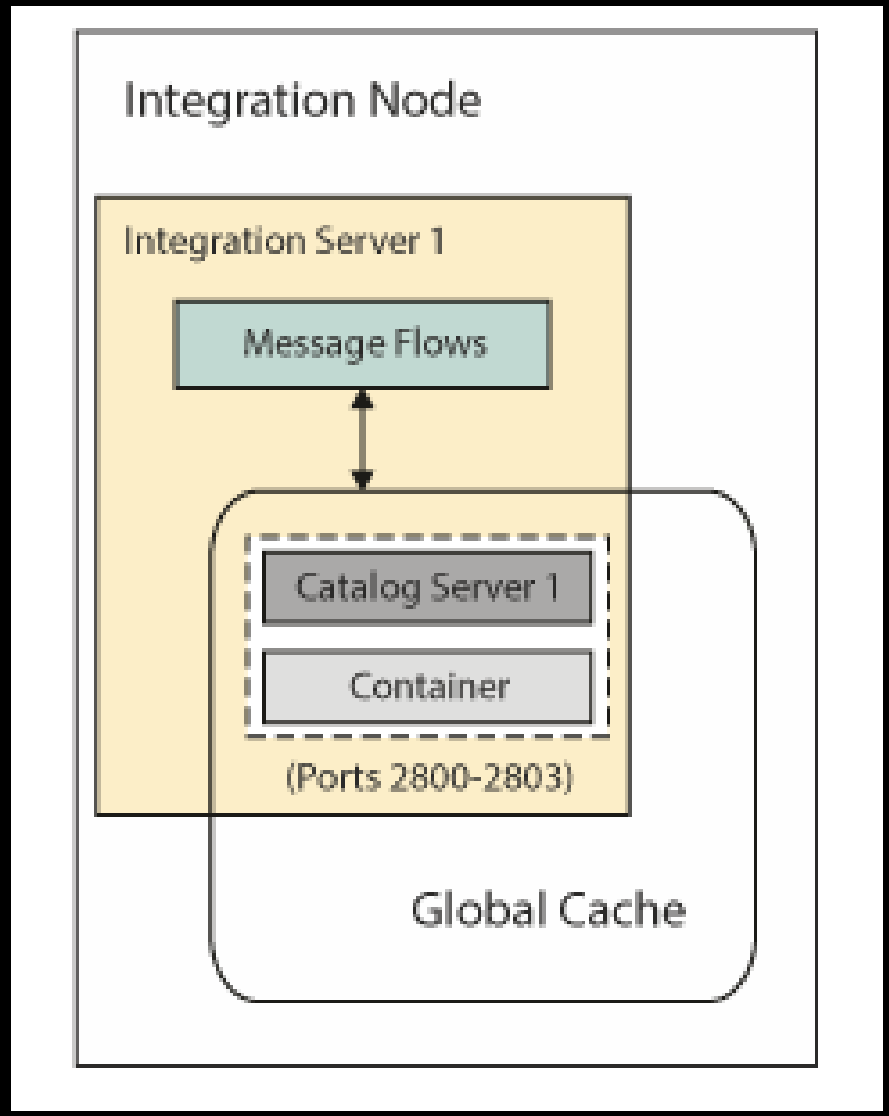
Global Cache Concepts

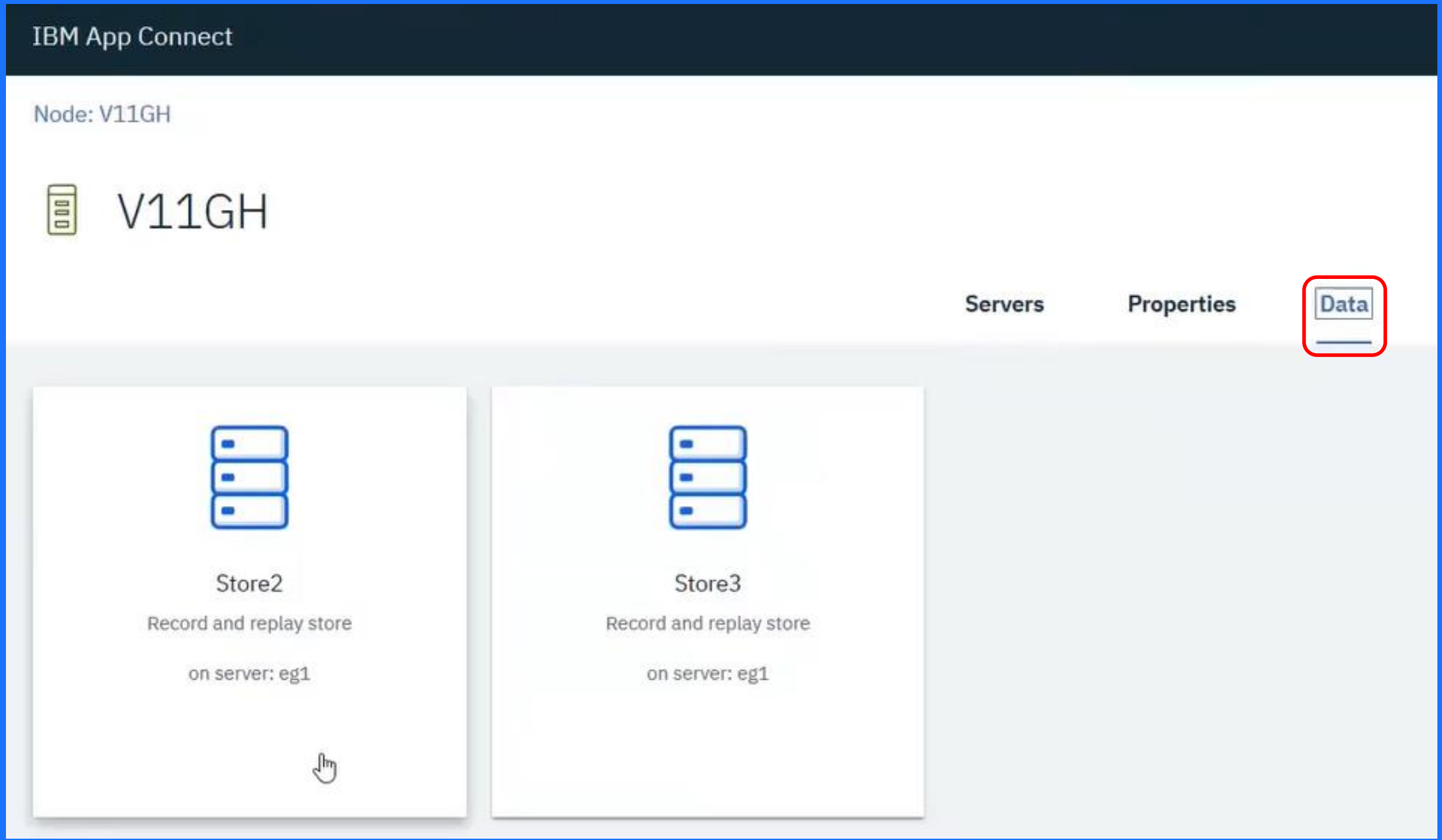
Global Cache Container servers:

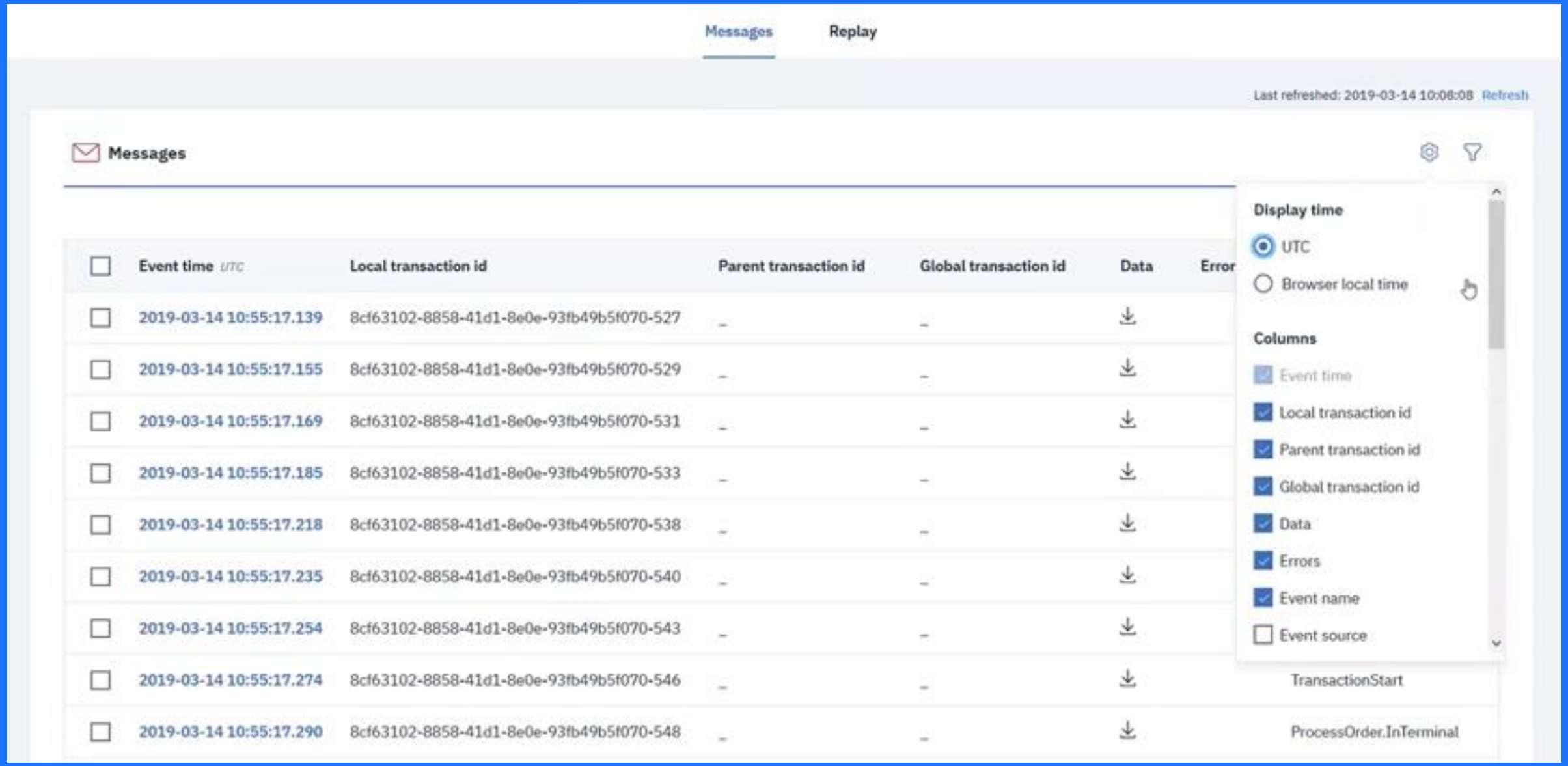
- Container component embedded in the Integration Server
- Holds a subset of the cache data
- All container servers in the cache together host all the cache data at least once
- By default we ensure all data is replicated at least once
- Global cache can cope with the loss of container servers without losing data

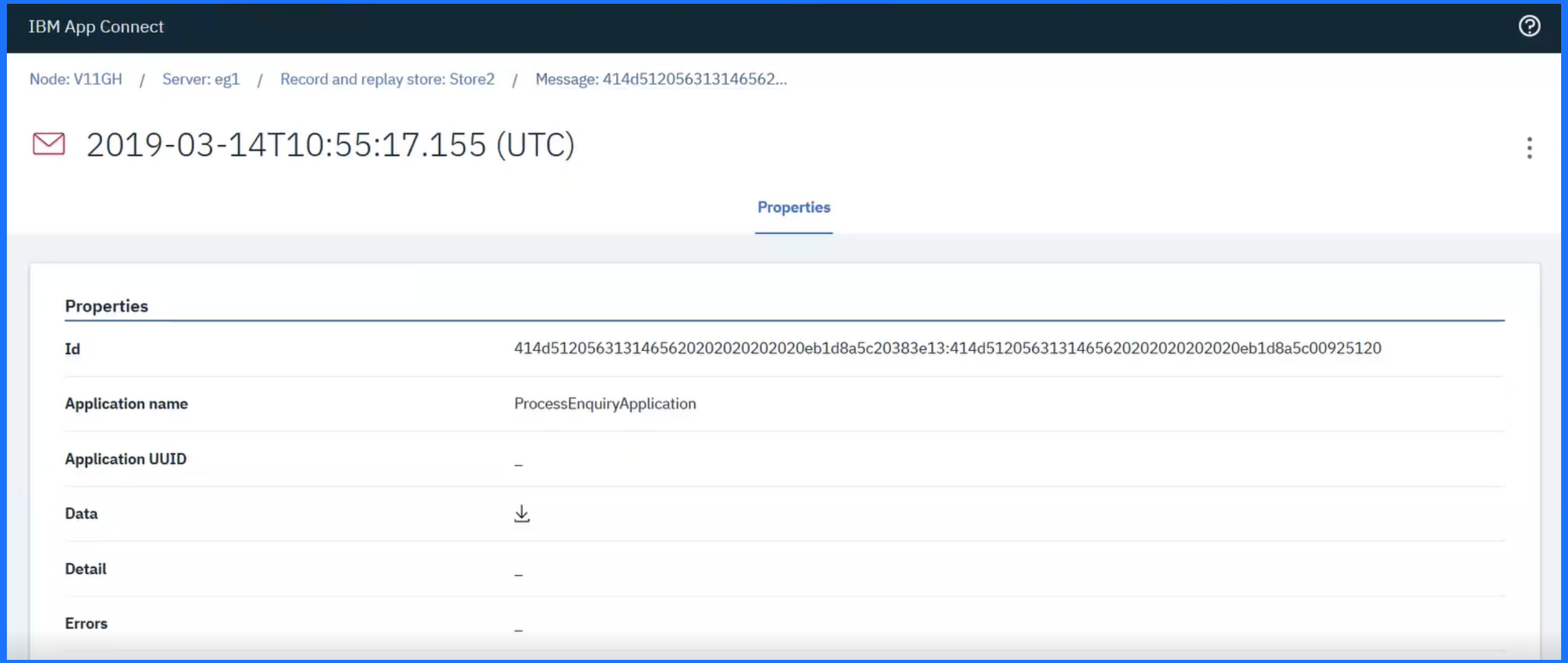
Global Cache Catalog servers:

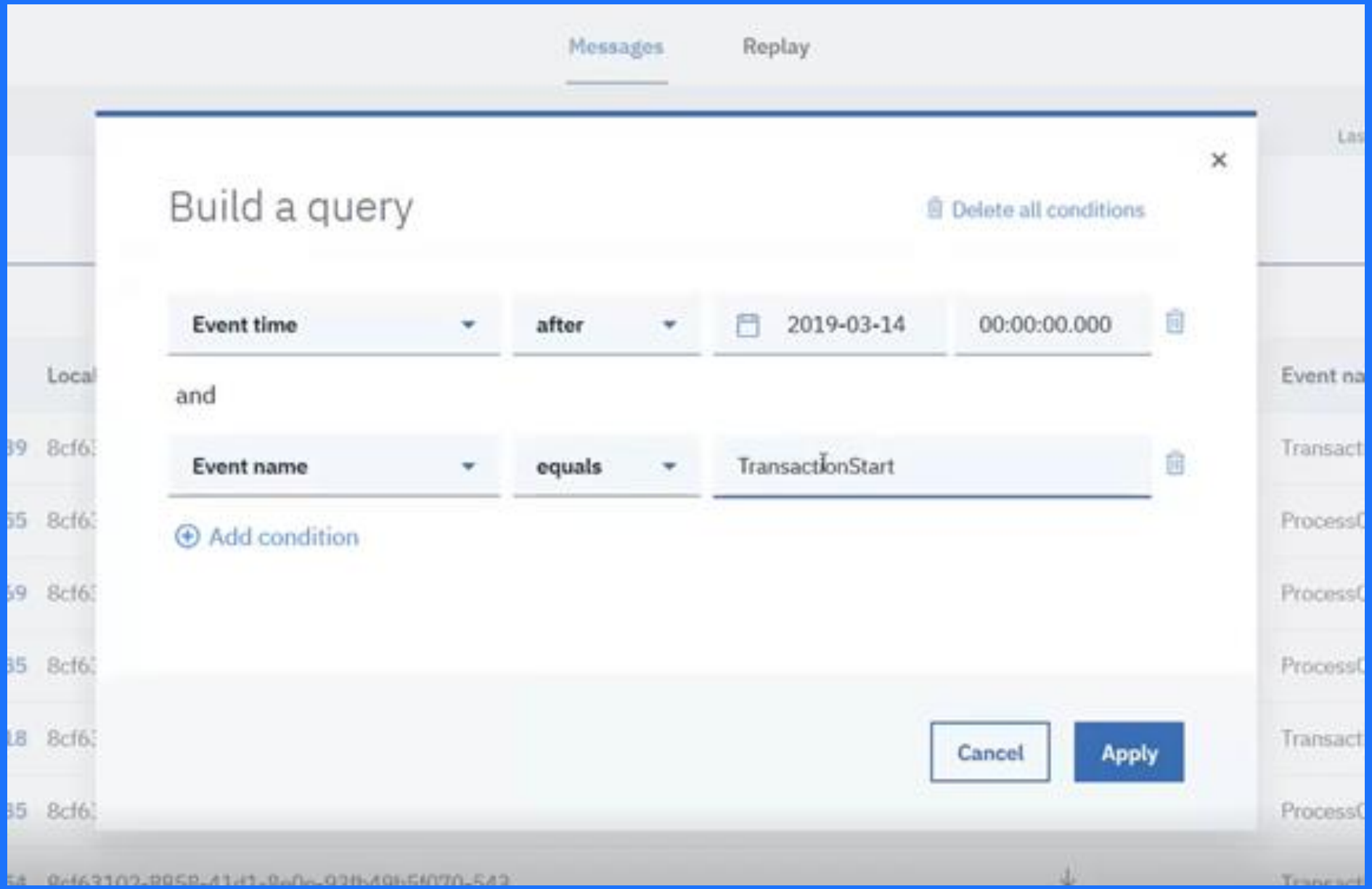
- Catalog component is embedded in the Integration Server
- Controls the placement of data and monitors the health of Container servers
- You must have at least 1 Catalog server in your Global cache
- To avoid losing cache data when a Catalog is lost, you can specify more than one Catalog server
- If the cache is shared by two integration servers, each of which hosts a catalog server, then if one catalog server fails, the remaining catalog server can still be accessed.

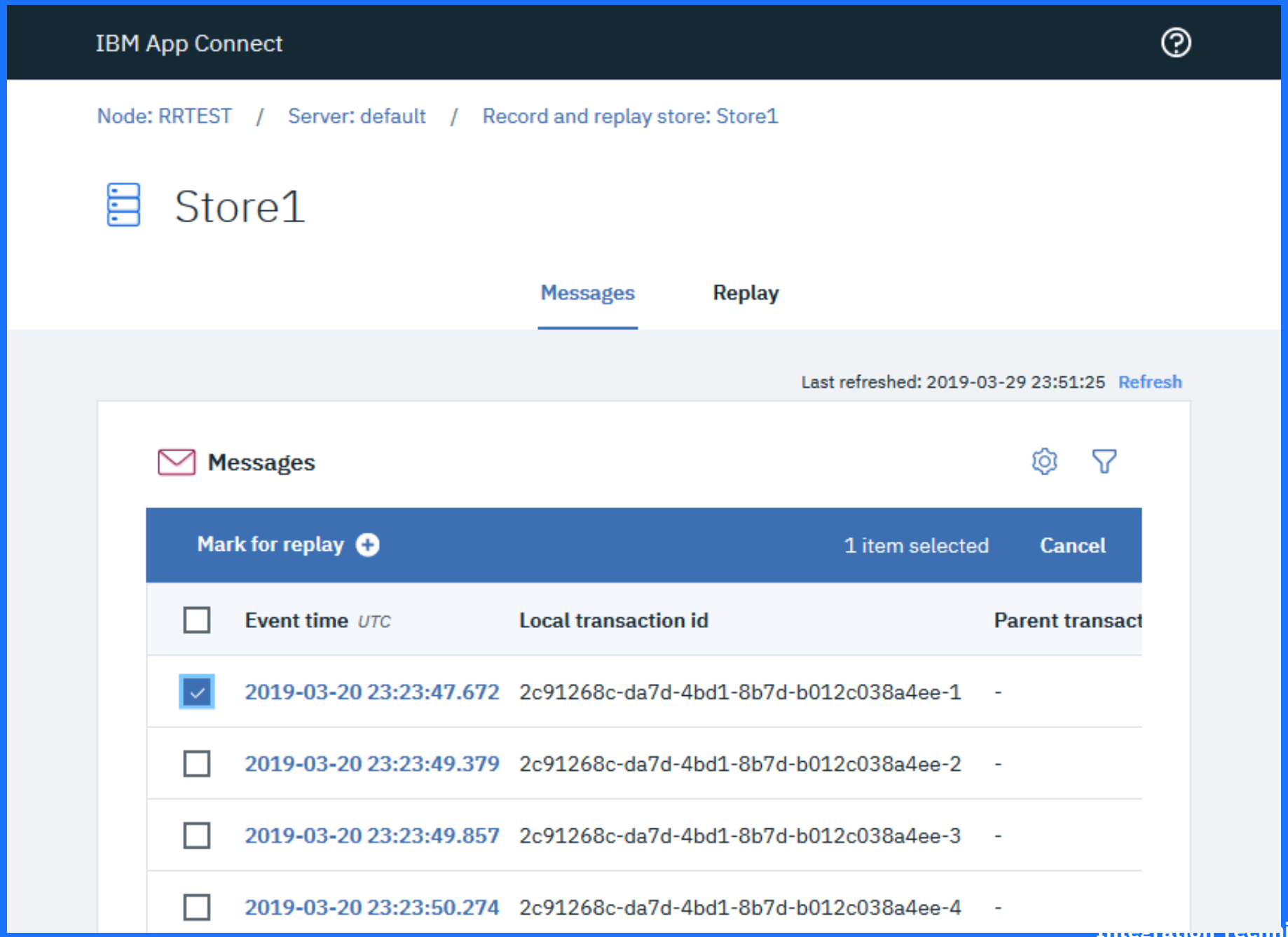


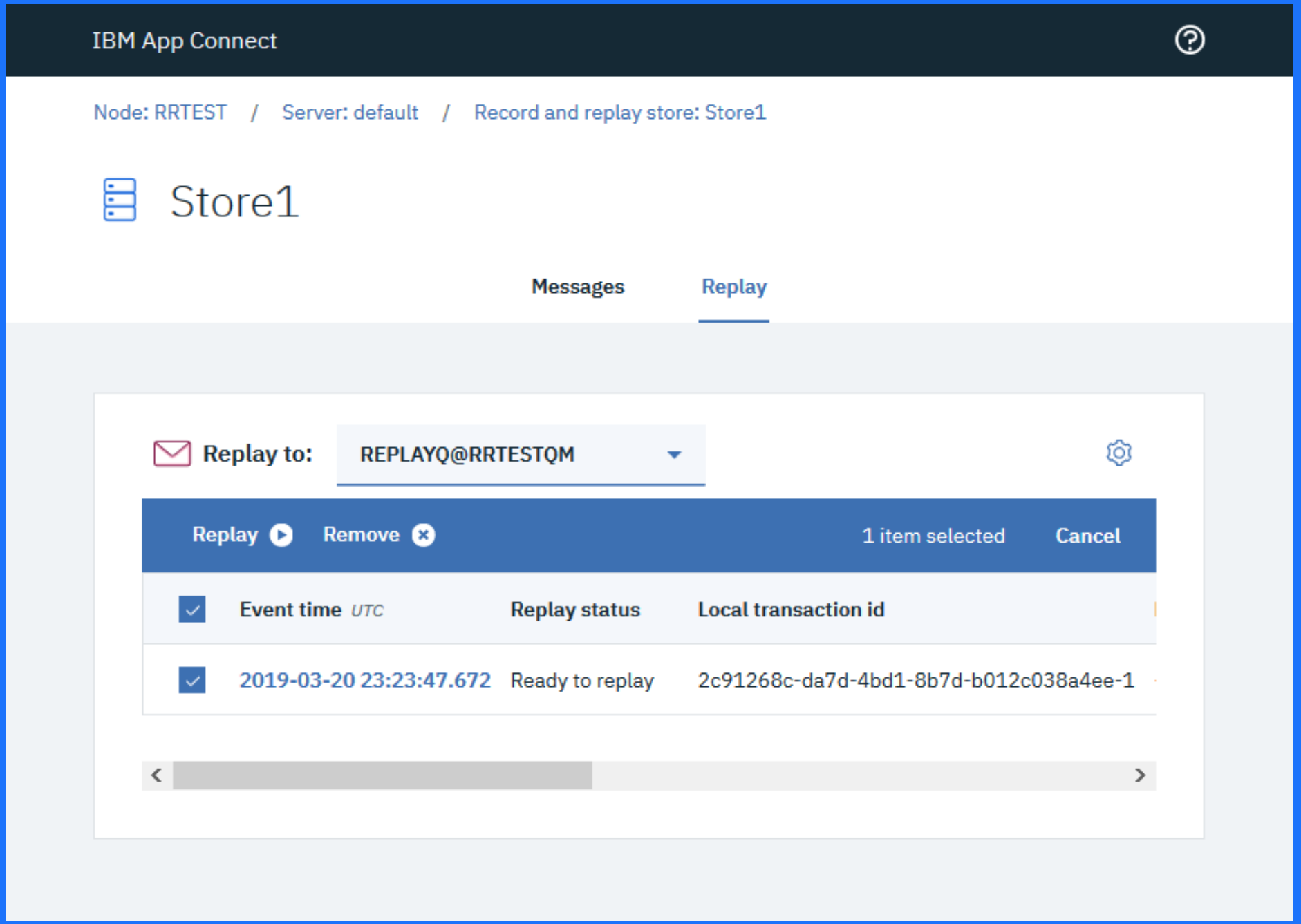

IBM App Connect
Node: V11GH
V11GH
Servers
Properties
Data
Store2
Record and replay store
on server: eg1
Store3
Record and replay store
on server: eg1


Messages
Replay
Last refreshed: 2019-03-14 10:08:08 Refresh
Messages
Display time
UTC
Browser local time
Columns
Event time
Local transaction id
Parent transaction id
Global transaction id
Data
Errors
Event name
Event source
Event time UTC
Local transaction id
Parent transaction id
Global transaction id
Data
Error
2019-03-14 10:55:17.139 8cf63102-8858-41d1-8e0e-93fb49b5f070-527
2019-03-14 10:55:17.155 8cf63102-8858-41d1-8e0e-93fb49b5f070-529
2019-03-14 10:55:17.169 8cf63102-8858-41d1-8e0e-93fb49b5f070-531
2019-03-14 10:55:17.185 8cf63102-8858-41d1-8e0e-93fb49b5f070-533
2019-03-14 10:55:17.218 8cf63102-8858-41d1-8e0e-93fb49b5f070-538
2019-03-14 10:55:17.235 8cf63102-8858-41d1-8e0e-93fb49b5f070-540
2019-03-14 10:55:17.254 8cf63102-8858-41d1-8e0e-93fb49b5f070-543
2019-03-14 10:55:17.274 8cf63102-8858-41d1-8e0e-93fb49b5f070-546
TransactionStart
2019-03-14 10:55:17.290 8cf63102-8858-41d1-8e0e-93fb49b5f070-548
ProcessOrder.InTerminal


IBM App Connect
Node: V11GH / Server: eg1 / Record and replay store: Store2 / Message: 414d512056313146562...
2019-03-14T10:55:17.155 (UTC)
Properties
Properties
Id
414d5120563131465620202020202020eb1d8a5c20383e13:414d5120563131465620202020202020eb1d8a5c00925120
Application name
ProcessEnquiryApplication
Application UUID
–
Data
Detail
–
Errors
–


Messages
Replay
Build a query
Delete all conditions
Event time
after
2019-03-14
00:00:00.000
and
Event name
equals
TransactionStart
Add condition
Cancel
Apply


IBM App Connect
Node: RRTEST / Server: default / Record and replay store: Store1
Store1
Messages
Replay
Last refreshed: 2019-03-29 23:51:25 Refresh
Messages
Mark for replay
1 item selected
Cancel
Event time UTC
Local transaction id
Parent transact
2019-03-20 23:23:47.672 2c91268c-da7d-4bd1-8b7d-b012c038a4ee-1 -
2019-03-20 23:23:49.379 2c91268c-da7d-4bd1-8b7d-b012c038a4ee-2 -
2019-03-20 23:23:49.857 2c91268c-da7d-4bd1-8b7d-b012c038a4ee-3 -
2019-03-20 23:23:50.274 2c91268c-da7d-4bd1-8b7d-b012c038a4ee-4 -


IBM App Connect
Node: RRTEST / Server: default / Record and replay store: Store1
Store1
Messages
Replay
Replay to:
REPLAYQ@RRTESTQM
Replay
Remove
1 item selected
Cancel
Event time UTC
Replay status
Local transaction id
2019-03-20 23:23:47.672
Ready to replay
2c91268c-da7d-4bd1-8b7d-b012c038a4ee-1

And we haven't forgotten about …

- Support for AIX
- "One Click" Push to API Connect
- Enhancements fo mqsichangeproperties and mqsireportproperties use cases
- Stronger mitigation for CMP API
  - Localised administration client across Windows Named Pipes / Unix Domain Sockets
- Cleaner (protected) C++ User Exit interfaces as an enabler for transaction tracking
- Expansion of Policy Redeploy
- Keyword support
- Message Sets and Adapter models in Shared Libraries
- Policies for CORBA, IMS, JDEdwards, PeopleSoft and Siebel
- Further tools to leverage the v11 architecture – e.g. cloning, deploy action ImpactAnalysis
  - `apiv2/servers/deploy?deploy_action=ImpactAnalysis`

A Quick Migration Example


Thank you