

# Installation of NOI and Related Event feature

## Speakers:

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- **Installation and configuration of Event Analytics**
  - **Introduction**
  - **Data Flow**
  - **Installation and configuration examples for NOI 1.6.0.1**
- **Related Events feature**
  - **Introduction**
  - **Event Analytics Configuration usage**
  - **Example**
- **Q&A**



# Installation and configuration of NOI: Event Analytics component

**Presenter:**

**Mihaela Gheorghe**

*Senior Software Engineer / IBM Cloud Lab*

# Installation and configuration



Presenter: Mihaela Gheorghe

## Introduction

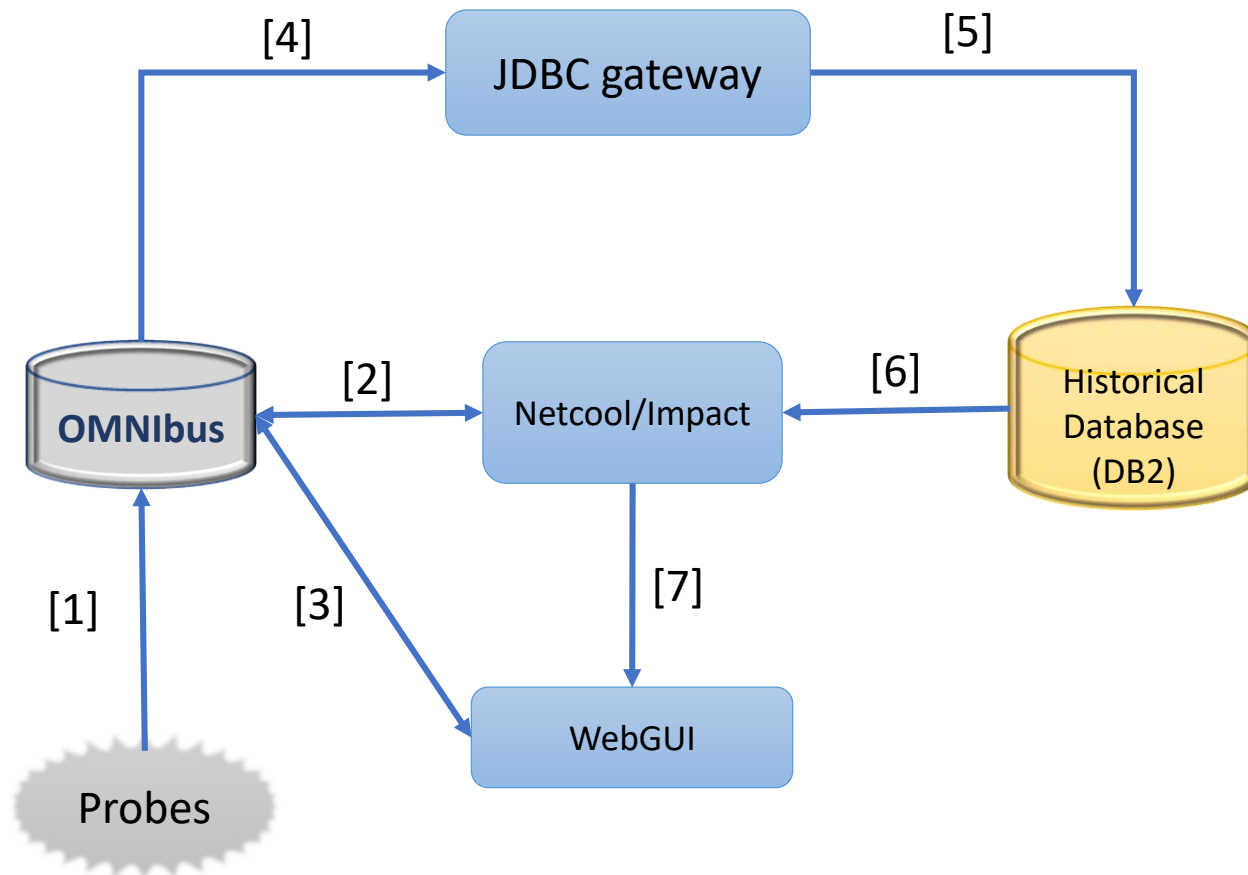
- NOI base solution (Operation Management) - 3 main components and capabilities:
  - ✓ **Event Analytics**
  - ✓ Event Search
  - ✓ IBM Connections Integration
- Event Analytics (**Related Events** and Seasonal Events) – used for determining event patterns, groups or seasonal trend and also to create parent and synthetic events.
- Event Analytics requires the following products to be installed and configured:
  - ✓ Netcool/OMNIBus core
  - ✓ JDBC Gateway
  - ✓ JazzSM/DASH
  - ✓ WebSphere and IBM Java SDK
  - ✓ WebGUI and Extension for NOI
  - ✓ Netcool/Impact and Extension for NOI
  - ✓ Gateway reporting configuration scripts
  - ✓ DB2

# Installation and configuration



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## Data flow



- [1] Events captured by the probes are forwarded to the Object Server.
- [2] Events are read from the Object Server and enriched by Impact.
- [3] Events are displayed and managed in WebGUI
- [4] JDBC gateway reads events from the Object Server
- [5] JDBC gateway forwards events to the Historical Database to be archived
- [6] Event analytics algorithms from Impact run on the archived event data
- [7] Analytics results are visualized and managed in WebGUI

# Installation and configuration (NOI 1.6.0.1)

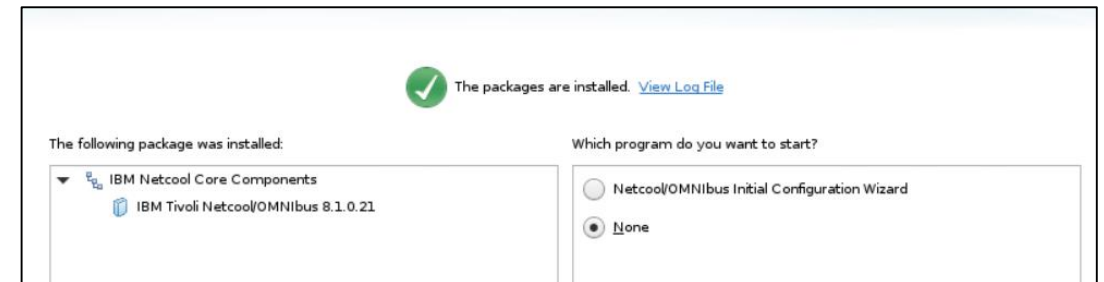
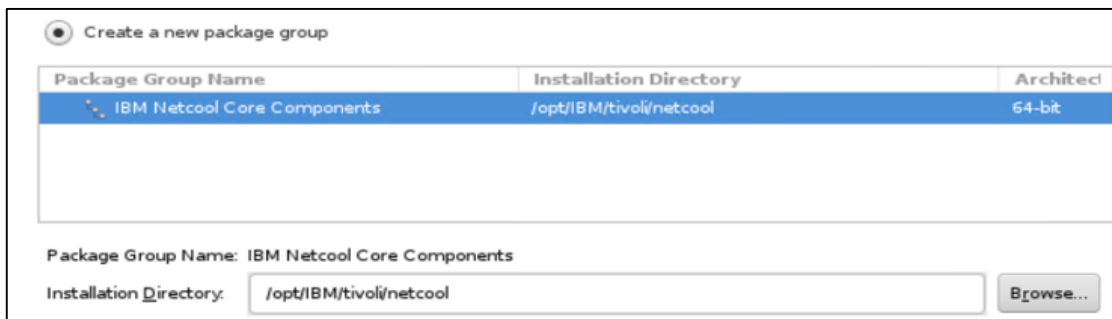
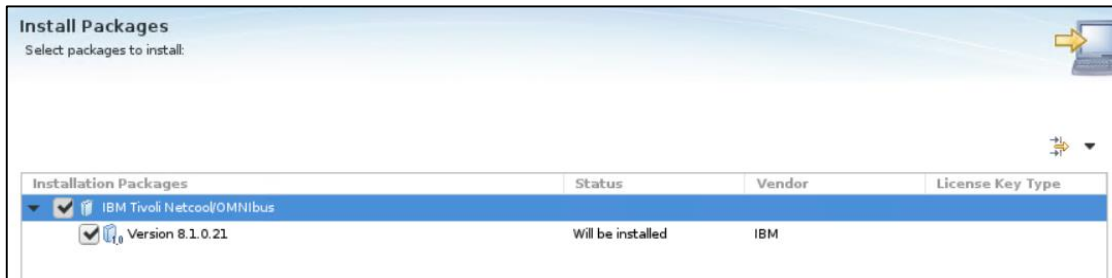


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## ■ Install Installation Manager 1.8.9



## ■ Install Netcool/OMNIbus core V8.1.0.21



# Installation and configuration (NOI 1.6.0.1)



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## ■ Netcool/OMNIBus core V8.1.0.21 – configuration

Create Object Server:        /opt/IBM/tivoli/netcool/omnibus/bin/nco\_dbinit -server NCOMS

Edit omni.dat:                vi /opt/IBM/tivoli/netcool/etc/omni.dat

```
[NCOMS]
{
    Primary: carpets1.castle.fyre.ibm.com 4100
}
```

Generate the interface:       /opt/IBM/tivoli/netcool/bin/nco\_igen

Start Object Server:        /opt/IBM/tivoli/netcool/omnibus/bin/nco\_objserv -name NCOMS &

## ■ Install DB2 11.1

1. Configuration    **Configuration**  
2. Features  
3. Languages  
4. Documentation  
5. DAS user  
6. Database parti...  
7. Instance-owning ...  
8. Fenced user  
9. Communication ...  
10. Notification set...  
11. Contact  
12. Summary

Directory: /opt/ibm/db2/V11.1

Select the installation type

Typical    Custom

Size: ~1310 MB    Size: 1210 - 1470 MB

☒ Create an instance. (Needed to store data.)  
☒ I agree to the IBM terms. [Click to view](#)

1. Configuration    **Instance Owner**  
2. Features  
3. Languages  
4. Documentation  
5. DAS user  
6. Database parti...  
7. Instance-owning ...  
8. Fenced user  
9. Communication ...  
10. Notification set...  
11. Contact  
12. Summary

Specify the instance-owning user information for the DB2 instance. DB2 will use this user to perform instance functions, and will store instance information in the user's home directory. The name of the instance will be the same as the user name.

☒ New user  
☐ Existing user

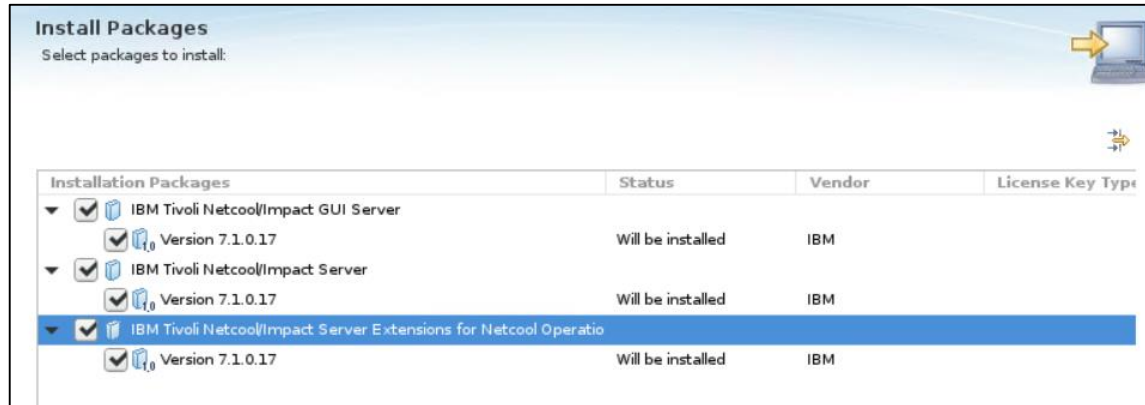
User name: db2inst1  
Group name: db2iadm1  
Password: \*\*\*\*\*  
Confirm password: \*\*\*\*\*  
Home directory: /home/db2inst1

# Installation and configuration (NOI 1.6.0.1)

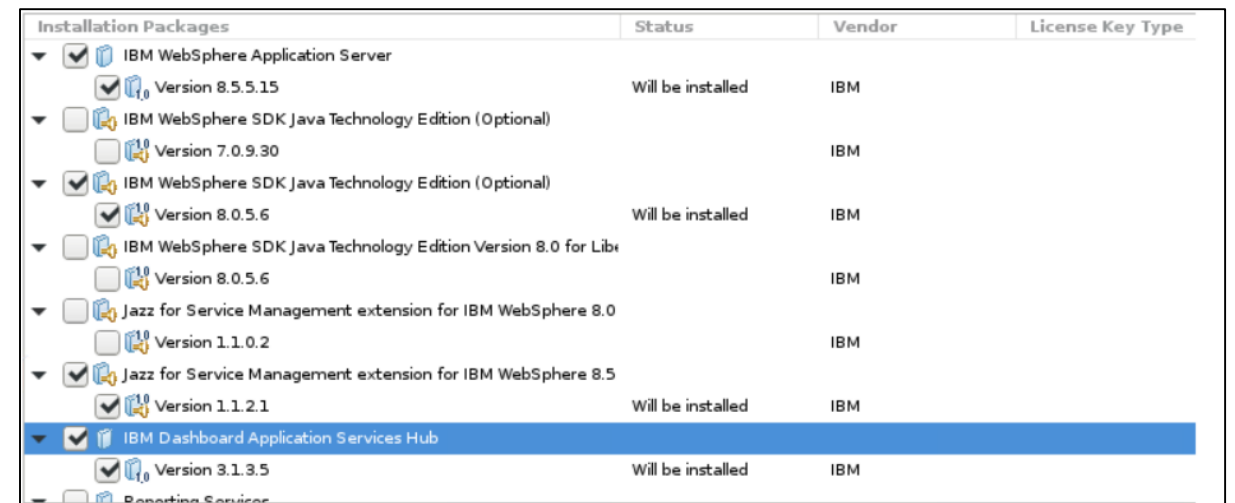


Presenter: Mihaela Gheorghe

## ■ Install Netcool/Impact 7.1.0.17 and Extension for NOI



## ■ Install JazzSM 1.1.3.5, WAS 8.5.5.15, Java 8.0.5.6





# Installation and configuration (NOI 1.6.0.1)



Presenter: Mihaela Gheorghe

## ■ Install WebGUI 8.1.0.17 and Extension for NOI

Installation Packages	Status	Vendor	License Key Type
▼ <input checked="" type="checkbox"/> IBM Tivoli Netcool/OMNibus Web GUI			
<input checked="" type="checkbox"/> Version 8.1.0.17	Will be installed	IBM	
▼ <input checked="" type="checkbox"/> Netcool Operations Insight Extensions for IBM Tivoli Netcool/OMN			
<input checked="" type="checkbox"/> Version 8.1.0.17	Will be installed	IBM	

## ■ Install JDBC Gateway installation

Repository:

/mnt/images/ibm/netcool/gateways/8.1/jdbc/im-nco-g-jdbc-6\_0.zip

Installation Packages	Status	Vendor
▼ <input checked="" type="checkbox"/> Netcool/OMNibus Gateway nco-g-jdbc		
<input checked="" type="checkbox"/> Version 1.6.0.0	Will be installed	IBM

☒ Use the existing package group

☐ Create a new package group

Package Group Name	Installation Directory	Architect
IBM Netcool Core Components	/opt/IBM/tivoli/netcool	64-bit
IBM Tivoli Netcool Impact	/opt/IBM/tivoli/impact	64-bit

Package Group Name: IBM Netcool Core Components

Installation Directory:

# Installation and configuration (NOI 1.6.0.1)



Presenter: Mihaela Gheorghe

## ■ Install gateway reporting configuration scripts

Repository:

/mnt/images/ibm/netcool/gateways/8.1/jdbc-rpt-scripts/im-nco-g-jdbc-rpt-scripts-1\_0.zip

Installation Packages	Status	Vendor
Netcool/OMNibus Gateway nco-g-jdbc-reporting-scripts		
Version 1.1.0.0	Will be installed	IBM

☒ Use the existing package group

☐ Create a new package group

Package Group Name	Installation Directory	Archited
IBM Netcool Core Components	/opt/IBM/tivoli/netcool	64-bit
IBM Tivoli Netcool Impact	/opt/IBM/tivoli/impact	64-bit

Package Group Name: IBM Netcool Core Components

Installation Directory:

## ■ Install the DB2 JDBC driver files

/opt/ibm/db2/V11.1/java

db2jcc.jar

db2jcc\_licence\_cu.jar

cp db2jcc.jar /opt/IBM/tivoli/netcool/omnibus/gates/java

cp db2jcc\_licence\_cu.jar /opt/IBM/tivoli/netcool/omnibus/gates/java

```
[root@carpets1 etc]# cd /opt/ibm/db2/V11.1/java/
[root@carpets1 java]# cp db2
db2dbgm.jar          db2jcc4.jar          db2policy.jar
db2ext.jar           db2jcc.jar           db2qgjdbc.jar
db2java.zip          db2jcc_license_cu.jar db2umplugin.jar
[root@carpets1 java]# cp db2jcc.jar /opt/IBM/tivoli/netcool/omnibus/gates/java
[root@carpets1 java]# cp db2jcc_licence_cu.jar /opt/IBM/tivoli/netcool/omnibus/gates/java
```

# Installation and configuration (NOI 1.6.0.1)



Presenter: Mihaela Gheorghe

## ■ Configure REPORTER database (Historical database for Event Analytics)

/opt/IBM/tivoli/netcool/omnibus/gates/reporting/db2/db2.reporting.sql

- Uncomment the CREATE DATABASE line.
- Set the default user name and password to match the ones from DB2
- Uncomment both instances of the following SQL command that appears twice:

```
CREATE DATABASE reporter @  
CONNECT TO reporter USER db2inst1 USING netcool @
```

```
SERVERNAME VARCHAR (64) NOT NULL,  
SERVERSERIAL INTEGER NOT NULL  
-- Uncomment the line below to enable foreign keys  
-- This helps pruning by only requiring the alert to be  
-- deleted from the status table  
CONSTRAINT eventref FOREIGN KEY (SERVERNAME, SERVERSERIAL) REFERENCES REPORTER_STATUS(SERVERNAME, SERVERSERIAL) ON DELETE CASCADE )  
DATA CAPTURE NONE@
```

```
SERVERNAME VARCHAR (64) NOT NULL,  
SERVERSERIAL INTEGER NOT NULL  
-- Uncomment the line below to enable foreign keys  
-- This helps pruning by only requiring the alert to be  
-- deleted from the status table  
CONSTRAINT eventref FOREIGN KEY (SERVERNAME, SERVERSERIAL) REFERENCES REPORTER_STATUS(SERVERNAME, SERVERSERIAL) ON DELETE CASCADE )  
DATA CAPTURE NONE@
```

- Connect as db2inst1 and run the following command to create the database structure:

cd \$OMNIHOME/gates/reporting/db2

db2 -td@ -vf db2.reporting.sql

```
[db2inst1@carpets1 server]$ cd /opt/IBM/tivoli/netcool/omnibus/gates/reporting/db2/  
[db2inst1@carpets1 db2]$  
[db2inst1@carpets1 db2]$ db2 -td@ -vf db2.reporting.sql
```

# Installation and configuration (NOI 1.6.0.1)



Presenter: Mihaela Gheorghe

- **Configure REPORTER database (Historical database for Event Analytics)**
  - Connect to the REPORTER database and check that all tables are retrieved correctly

```
[db2inst1@carpets1 db2]$ db2 connect to reporter

Database Connection Information

Database server      = DB2/LINUX8664 11.1.0
SQL authorization ID = DB2INST1
Local database alias = REPORTER
```

```
[db2inst1@carpets1 db2]$ db2 list tables

Table/View          Schema      Type  Creation time
-----
REPORTER_CLASSES    DB2INST1    T     2019-10-17-13.24.49.693157
REPORTER_CONVERSIONS DB2INST1    T     2019-10-17-13.24.50.096270
REPORTER_DETAILS     DB2INST1    T     2019-10-17-13.24.46.479915
REPORTER_GROUPS      DB2INST1    T     2019-10-17-13.24.48.917834
REPORTER_JOURNAL     DB2INST1    T     2019-10-17-13.24.45.757017
REPORTER_MEMBERS     DB2INST1    T     2019-10-17-13.24.49.317029
REPORTER_NAMES       DB2INST1    T     2019-10-17-13.24.48.550589
REPORTER_STATUS      DB2INST1    T     2019-10-17-13.24.44.863532
REP_AUDIT            DB2INST1    V     2019-10-17-13.24.51.649205
REP_AUDIT_ACK        DB2INST1    T     2019-10-17-13.24.48.133477
REP_AUDIT_OWNERGID   DB2INST1    T     2019-10-17-13.24.47.319585
REP_AUDIT_OWNERUID   DB2INST1    T     2019-10-17-13.24.46.899470
REP_AUDIT_SEVERITY   DB2INST1    T     2019-10-17-13.24.47.712743
REP_REFERENCE_DATE   DB2INST1    V     2019-10-17-13.24.51.535979
REP_SEVERITY_TYPES   DB2INST1    T     2019-10-17-13.24.50.525557
REP_TIME_PERIODS     DB2INST1    T     2019-10-17-13.24.50.998474
STATUS_VW            DB2INST1    V     2019-10-17-13.24.51.599446

17 record(s) selected.
```

# Installation and configuration (NOI 1.6.0.1)



Presenter: Mihaela Gheorghe

## ■ Configure the JDBC Gateway

- Copy the gateway configuration files from \$OMNIHOME/gates/jdbc to \$OMNIHOME/etc/

```
cd $OMNIHOME/gates/jdbc
cp reporting.jdbc.map $OMNIHOME/etc/JDBC_GATE.map
cp reporting.G_JDBC.props $OMNIHOME/etc/JDBC_GATE.props
cp jdbc.rdrwtr.tblrep.def $OMNIHOME/etc/JDBC_GATE.rdrwtr.tblrep.def
cp jdbc.startup.cmd $OMNIHOME/etc/JDBC_GATE.startup.cmd
```

- Edit JDBC and Object Server Connection properties sections (JDBC\_GATE.props)

```
# JDBC Connection properties
Gate.Jdbc.Driver: 'com.ibm.db2.jcc.DB2Driver' # STRING (JDBC Driver)
Gate.Jdbc.Url: 'jdbc:db2://carpets1.castle.fyre.ibm.com:50000/reporter' # STRING (JDBC connection URL)
Gate.Jdbc.Username: 'db2inst1' # STRING (JDBC username)
Gate.Jdbc.Password: 'netcool' # STRING (JDBC password)
Gate.Jdbc.ReconnectTimeout: 30 # INTEGER (JDBC database reconnection timeout)
Gate.Jdbc.InitializationString: '' # STRING (JDBC connection initialization string)
```

```
# ObjectServer Connection properties
Gate.RdrWtr.Username: 'root' # STRING ([RdrWtr] Name of the user to connect as.)
Gate.RdrWtr.Password: '' # STRING ([RdrWtr] Password of the user to connect as.)
```

# Installation and configuration (NOI 1.6.0.1)



Presenter: Mihaela Gheorghe

## ■ Configure the JDBC Gateway

- Add the following properties within JDBC\_GATE.props

Gate.RdrWtr.Server:'NCOMS'

MessageLog : '/opt/IBM/tivoli/netcool/omnibus/log/JDBC\_GATE.log'

Name : 'JDBC\_GATE'

PropsFile : '/opt/IBM/tivoli/netcool/omnibus/etc/JDBC\_GATE.props'

Gate.MapFile : '/opt/IBM/tivoli/netcool/omnibus/etc/JDBC\_GATE.map'

Gate.RdrWtr.TblReplicateDefFile : '/opt/IBM/tivoli/netcool/omnibus/etc/JDBC\_GATE.rdrwtr.tblrep.def'

Gate.StartupCmdFile : '/opt/IBM/tivoli/netcool/omnibus/etc/JDBC\_GATE.startup.cmd'

Gate.RdrWtr.Description : 'JDBC Gateway'

- Edit JDBC\_GATE.startup.cmd file and remove the comments from TRANSFER commands

```
TRANSFER FROM 'alerts.conversions' TO 'REPORTER_CONVERSIONS' DELETE USING TRANSFER_MAP ConversionsMap;  
TRANSFER FROM 'alerts.objclass' TO 'REPORTER_CLASSES' DELETE USING TRANSFER_MAP ObjectClassesMap;  
TRANSFER FROM 'master.groups' TO 'REPORTER_GROUPS' DELETE USING TRANSFER_MAP GroupsMap;  
TRANSFER FROM 'master.members' TO 'REPORTER_MEMBERS' DELETE USING TRANSFER_MAP MembersMap;  
TRANSFER FROM 'master.names' TO 'REPORTER_NAMES' DELETE USING TRANSFER_MAP NamesMap;
```

# Installation and configuration (NOI 1.6.0.1)



Presenter: Mihaela Gheorghe

## ▪ Configure the JDBC Gateway

- Add the JDBC information into \$NCHOME/etc/omni.dat

```
[JDBC_GATE]
{
    Primary: carpets1.castle.fyre.ibm.com 4300
}
```

- Update the interfaces

/opt/IBM/tivoli/netcool/bin/nco\_igen

- Start JDBC Gateway: \$OMNIHOME/bin/nco\_g\_jdbc -name JDBC\_GATE &

```
[root@carpets1 bin]# ./nco_g_jdbc -name JDBC_GATE &
[2] 12308
[root@carpets1 bin]#
Netcool/OMNIBus JDBC gateway - Version 8.1.0 64-bit

(C) Copyright IBM Corp. 1994, 2012

Server 'JDBC_GATE' initialised - entering RUN state.
```



# Installation and configuration (NOI 1.6.0.1)



Presenter: Mihaela Gheorghe





- **Update Object Server schema**

```
[root@carpets1 db]# cd /opt/IBM/tivoli/impact/add-ons/RelatedEvents/db
[root@carpets1 db]# ls | grep objectserver
relatedevents_objectserver.sql
relatedevents_objectserver_update_fp5.sql
```

```
cd /opt/IBM/tivoli/netcool/omnibus/bin/
./nco_sql -server NCOMS -user root -password " < /opt/IBM/tivoli/impact/add-ons/RelatedEvents/db/relatedevents_objectserver.sql

./nco_sql -server NCOMS -user root -password " < /opt/IBM/tivoli/impact/add-ons/RelatedEvents/db/relatedevents_objectserver_update_fp5.sql
```

- **Configure WebGUI – add Object Server as data source and define Impact connection**

   				
Name		Enabled	In Default Group	
NCOMS		true	true	

Name	Type	Description	Connection	ID
Impact_NCICLUSTER	Impact_NCICLUSTER	Impact_NCICLUSTER	Remote	Impact_NCICLUSTER.carpets1.c



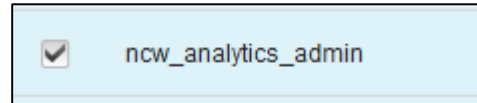
# Installation and configuration (NOI 1.6.0.1)



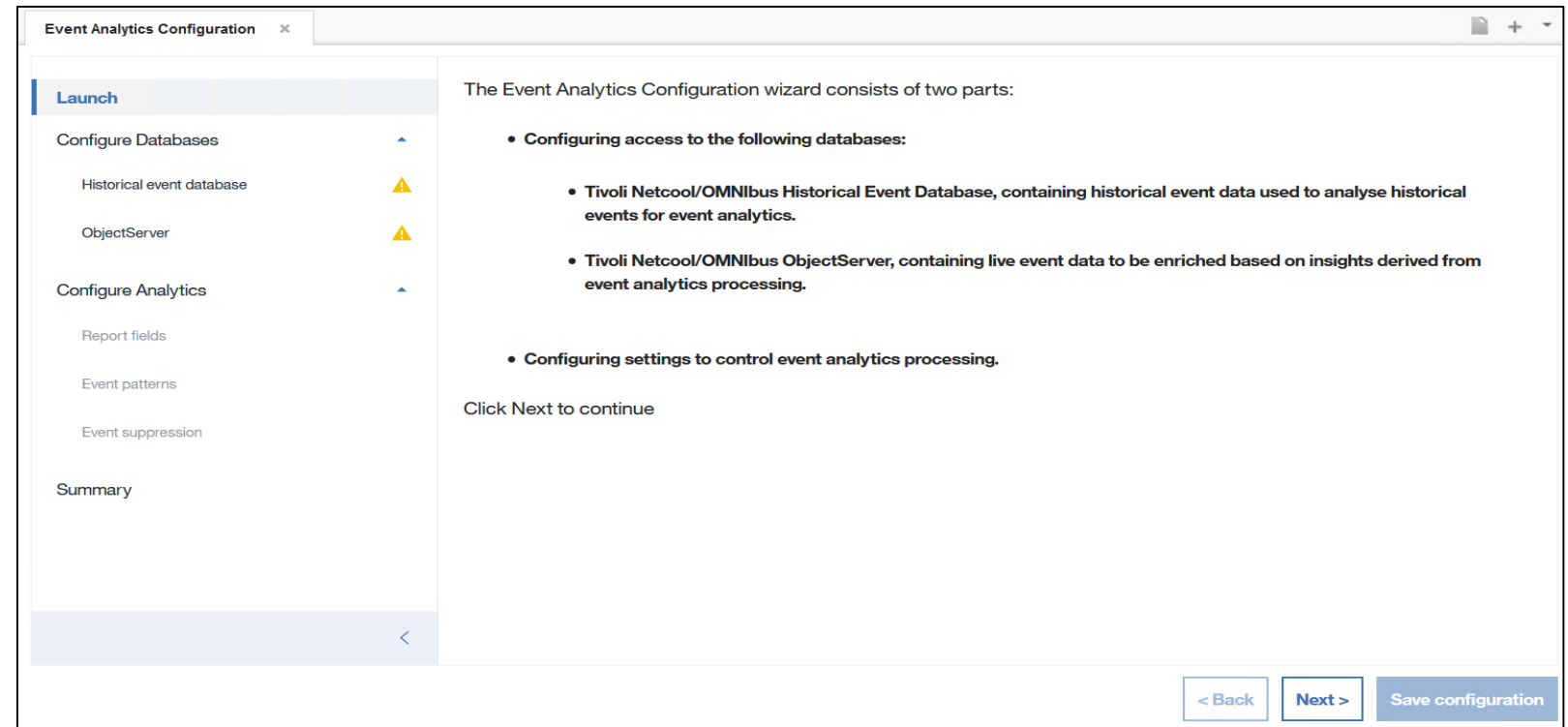
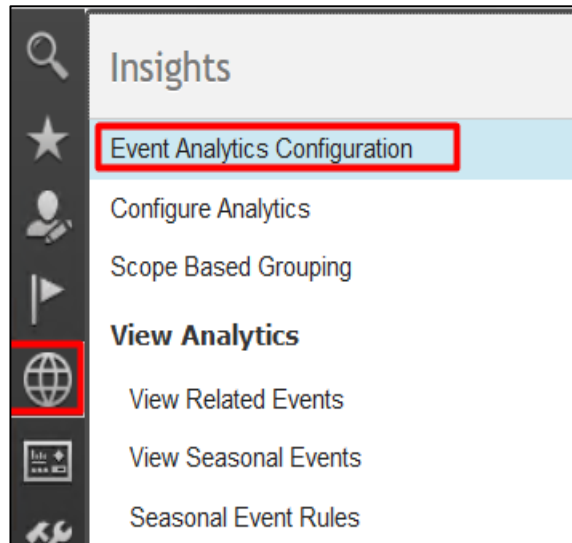
Presenter: Mihaela Gheorghe

## ■ Configure Event Analytics - wizard

- add ncw\_analytics\_admin role



- Start Event Analytics Configuration wizard



# Installation and configuration (NOI 1.6.0.1)



Presenter: Mihaela Gheorghe

## ■ Configure Event Analytics - wizard

### Configure historical event database

---

1. Database

☒ DB2 ☐ MS SQL Server ☐ Oracle

2. Connection details

Hostname

carpets1.castle.fyre.ibm.com |

Port

50000

Username

db2inst1


Password

.....

Database name

REPORTER

Connect

 Successfully connected to historical event database

# Installation and configuration (NOI 1.6.0.1)



Presenter: Mihaela Gheorghe

## ■ Configure Event Analytics - wizard

### 3. Table name

Database schema

DB2INST1

History table

REPORTER\_STATUS

Validate table

✓ Successfully validated table

### 4. Timestamp [More info](#)

Timestamp field

FIRSTOCCURRENCE

< Back

Next >

Save configuration

# Installation and configuration (NOI 1.6.0.1)



Presenter: Mihaela Gheorghe

## ■ Configure Event Analytics - wizard

### Configure ObjectServer

---

#### 1. Primary

**Hostname**

carpets1.castle.fyre.ibm.com

**Port**

4100

**Username**

root

**Password**

Enter password for this user

✓

Successfully connected to primary ObjectServer

×

☐ Enable SSL mode

☐ Enable backup ObjectServer

Connect

# Installation and configuration (NOI 1.6.0.1)



Presenter: Mihaela Gheorghe

## ■ Configure Event Analytics - wizard

### Configure event patterns

---

An event pattern is a set of events that typically occur in sequence on a network resource [More info](#) ⓘ

#### 1. Global settings

**Default event type** [More info](#) ⓘ

In which Historical Event Database column do you store event type information?

EVENTID ▼

**Default event identity** [More info](#) ⓘ

In which Historical Event Database column(s) do you store event identity?

IDENTIFIER ▼

**Resource** [More info](#) ⓘ

In which Historical Event Database column(s) do you store resource information?

NODE ▼

Do you have another set of events that you categorize in a different way?

☐ Yes ☒ No

# Installation and configuration (NOI 1.6.0.1)



Presenter: Mihaela Gheorghe

## ■ **Configure Event Analytics - wizard**

### Configure event suppression

1. Event suppression [More info](#) ⓘ

Suppression field

SuppressEscl ▼

Suppression field value

Suppressed ▼

2. Event unsuppression [More info](#) ⓘ

Unsuppression field

SuppressEscl ▼

Unsuppression field value

Normal ▼

# Installation and configuration (NOI 1.6.0.1)



Presenter: Mihaela Gheorghe

## ■ Configure Event Analytics - wizard

The screenshot shows the 'Event Analytics Configuration' wizard in the 'Summary' step. The left sidebar contains a navigation menu with the following items: Launch, Configure Databases (with sub-items: Historical event database, ObjectServer), Configure Analytics (with sub-items: Report fields, Event patterns, Event suppression), and the currently selected 'Summary' item. The main content area is titled 'Summary' and contains the following configuration details:

- Historical event database**
  - Database type: DB2
  - Connection details
    - Hostname: carpets1.castle.fyre.ibm.com
    - Port: 50000
    - Username: db2inst1
    - Password: \*\*\*\*\* (show)
  - Database table
    - Schema: DB2INST1
    - Table name: REPORTER\_STATUS
  - Timestamp
    - Column name: FIRSTOCCURRENCE
- ObjectServer**
  - Primary
    - Hostname: carpets1.castle.fyre.ibm.com
    - Port: 4100
    - Username: root
    - Password:
  - Backup
    - Enabled: false
    - Hostname: localhost
    - Port: 4100

At the bottom right of the wizard, there are three buttons: '< Back', 'Next >', and 'Save configuration'.

The screenshot shows the 'Event Analytics Configuration' wizard with a green success message at the bottom: 'Event analytics configuration has been saved successfully. To configure analytics scans, click Insights > Configure Analytics.'



# NOI: RELATED EVENTS

**Presenter:**

**Elena Mititelu**

*Senior Software Engineer / IBM Cloud Lab*



# NOI: Related Events – Terms & Usage



Presenter: Elena Mititelu

Event analytics offers two type of events. Seasonality Events(SE) and Related events(RE)

SE are those events that are reoccurring regularly at a particular “hour of day”, “day of week” and “day of month”.

RE are those events that that occur together and within the same time window.

## **Event Analytics Configuration usage**

Using RE/SE starts from the moment when setting your install via Event Analytics Configuration or `nci_trigger` command.

Extra fields can be added in “Configure report fields” depending on the needs.

Report fields within “Configure report fields” are:

Aggregate Fields are the fields that will be available in “Events” view under “View Related Events” page and the right-hand view in “View Seasonal Events”

# NOI: Related Events



Presenter: Elena Mititelu

View Related Events x View Seasonal Events x Event Analytics Configuration x Historical Events x

Launch  
Configure Databases  
    Historical event database  
    ObjectServer  
Configure Analytics  
    Report fields  
Event patterns  
Event suppression  
Summary

### Configure report fields

1. Aggregate fields [More info](#)

Database Field	Function	Column title	Column width	Include in reports
SUMMARY	Example	Summary	30 %	<input type="checkbox"/> Seasonal <input checked="" type="checkbox"/> Related
SEVERITY	Max	Maximum Severity	15 %	<input checked="" type="checkbox"/> Seasonal <input type="checkbox"/> Related
ALERTGROUP	Example	ALERTGROUP_EXA	30 %	<input checked="" type="checkbox"/> Seasonal <input type="checkbox"/> Related
ACKNOWLEDGED	Non-Blank Count	Acknowledgements	15 %	<input type="checkbox"/> Seasonal <input checked="" type="checkbox"/> Related
BP2ICODEAEL	Example	Bp2icodeael	30 %	<input checked="" type="checkbox"/> Seasonal <input checked="" type="checkbox"/> Related
NODE	Example	Node	30 %	<input checked="" type="checkbox"/> Seasonal <input checked="" type="checkbox"/> Related

< Back Next > Save confi

View Related Events x View Seasonal Events x Event Analytics Configuration x Historical Events x

New [3] Watched [0] Active [1] Expired [0] Archived [0]

#### Configuration

Name

All  
ELENA  
ELENA\_1

Total: 8 Selected: 1

#### Group Sources

Name	Groups	Events
Unallocated Groups (ELENA_1)	1	3

Total: 1 Selected: 0

#### Groups

Name	Events	Instanc	Reviewed
ELENA_1:0	3	47	No

Total: 1 Selected: 0

#### Events

Summary	Acknowledgements	Bp2icodeael	Node
Related Event Test Group 0	0		RelatedNode0
Related Event Test Group 1	0		RelatedNode1
Related Event Test Group 2	0		RelatedNode2

Note: We recommend that Event Identifier and Event type field should be added as rollup/aggregate

# NOI: Related Events



Presenter: Elena Mititelu

Historical report fields are the ones available in “Historical Events” page accessed from the seasonal events report right-click menu.

ObjectServer

Configure Analytics

Report fields

Event patterns

Event suppression

Summary

2. Historical report

More info

Database Field	Column title	Column width
SUMMARY	Summary	30 %
BP2ICODEAEL	Bp2icodeael	10 %
NODE	Node	20 %

View Seasonal Events

Historical Events

Summary	Node	Severity	FirstOccurrence	LastOccurrence	Acknowledged	Tally	Bp2icodeael
Related Event Test Group 0	RelatedNode0	Warning	Jul 12, 2018 7:50:41 AM	Jul 12, 2018 7:50:41 AM		1	RelatedEventsAG0
Related Event Test Group 0	RelatedNode0	Warning	Jul 2, 2018 1:44:52 AM	Jul 2, 2018 1:44:52 AM		1	RelatedEventsAG0
Related Event Test Group 0	RelatedNode0	Warning	Jul 8, 2018 5:41:36 AM	Jul 8, 2018 5:41:36 AM		1	RelatedEventsAG0
Related Event Test Group 0	RelatedNode0	Warning	Jul 12, 2018 9:50:15 AM	Jul 12, 2018 9:50:15 AM		1	RelatedEventsAG0

View Seasonal Events

Historical Events

Configuration

Event Count

Seasonality

Reviewed By

Rule Created

Related Events Count

Maximum Severity

ALERTGROUP\_EXAMPLE

Bp2icodeael

ALL	5	High			0	Warning	RelatedEventsAG1	
SampleConfiguration	0	High			0	Warning	RelatedEventsAG0	
ELENA	1	High			0	Warning	RelatedEventsAG2	
aaaa	4	Med			0	Warning	Communication Alarm	
SE_TEST	0							

Show Seasonal Event Graphs

Show Historical Events

Show Related Event Details

Create Rule...

Export Selected Seasonal Events

# NOI: Related Events



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Instance report fields are the ones available in “Related Events Details” accessed from right-click menus in the “View Related Events”

Configure Analytics x

View Related Events x

New [6]

Watched [0]

Active [1]

Expired [0]

Archived [0]

Configuration

Name
ELENA_1
OFER
RE_TEST
SampleConfiguration
aaaa

Total: 9 Selected: 1

Group Sources

Name	Groups	Events
Unallocated Groups (RE_TEST)	3	9
RE_TEST_Suggestion0	1	3

Total: 2 Selected: 1

Groups

Name	Events	Instances	Reviewed
RE_TEST:2	3	138	No

Total: 1 Selected: 0

Events

Summary	Acknowledgements	Bp2icodeael	Node
Related Event Test Group 2 1	0	REAG	Node1
Related Event Test Group 2 2	0	REAG	Node2
Related Event Test Group 2 0	0	REAG	Node0

View Related Events x

Related Event Details x

Group Name: RE\_TEST:2

Pivot Event

Events

Correlation Rule

Events

Timeline

Date and Time	Unique Events	Contains Pivot Event	Offset	Time	Instances	Node	Summary	Alert Group	Severity	Acknowledgements	Bp2icodeael
Jul 1, 2018 11:36:47 AM	3	Yes	00:00:00	Jul 1, 2018 11:36:47 AM	138 / 138	Node0	Related Event Test Group 2 0	REAG0	Warning		REAG
Jul 1, 2018 2:14:00 PM	3	Yes	00:00:00	Jul 1, 2018 11:36:47 AM	138 / 138	Node1	Related Event Test Group 2 1	REAG1	Warning		REAG
Jul 14, 2018 3:06:14 AM	3	Yes	00:00:00	Jul 1, 2018 11:36:47 AM	138 / 138	Node2	Related Event Test Group 2 2	REAG2	Warning		REAG
Jul 15, 2018 2:00:53 AM	3	Yes									

# NOI: Related Events



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## Configure event patterns

An event pattern is a set of events that typically occur in sequence on a network resource.

Below is what you need to set so that the product discovers patterns based on your historical events

The field specified in "Default event type" will be the one used when creating default event pattern.

You have to choose a field so that it will reflect as best as possible your data.

Meaning, for example is not empty, it doesn't have same value for all your events. By default is ALERTGROUP.

The screenshot displays the 'Event Analytics Configuration' interface. On the left is a sidebar with a navigation menu containing: Launch, Configure Databases (with sub-items: Historical event database, ObjectServer), Configure Analytics (with sub-items: Report fields, Event patterns, Event suppression), and Summary. The 'Event patterns' option is currently selected and highlighted. The main content area is titled 'Configure event patterns' and includes a descriptive paragraph: 'An event pattern is a set of events that typically occur in sequence on a network resource', followed by a 'More info' link. Below this is section '1. Global settings'. It contains three configuration items, each with a 'More info' link: 'Default event type' (set to BP2ICODEAEL), 'Default event identity' (set to IDENTIFIER), and 'Resource' (set to NODE). Each item asks 'In which Historical Event Database column(s) do you store [type/identity/resource] information?'. At the bottom of the global settings is a question 'Do you have another set of events that you categorize in a different way?' with radio buttons for 'Yes' (selected) and 'No'. Section '2. Additional event types' is partially visible at the bottom, also with a 'More info' link.

# NOI: Related Events



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In case there are other events for which you want a different pattern than the default one to apply, then you need to add additional event types as below

Database filter will specify the event filter for Historical database and Object server filter will be the event filter for live OMNIBus events.

When additional event types are used Impact will apply this type for all events which match the type filter.

## 2. Additional event types

[More info](#) 

Add new

Database filter

ObjectServer filter

Event type field

Event identity field(s)

( ORIGINALSEVERITY >=

( Severity > 2 )

BP2ICODEAEL

IDENTIFIER



# NOI: Related Events



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Example:

### Modify Existing Configuration

General

Related Events

Advanced

\* Name: ?

RE\_TEST

Description:

For test scope

\* Analytics Type: ?

☐ Seasonal event

☒ Related event

\* Date range:

☐ Relative

☒ Fixed

Events from last:

Months

\* Start date: ?

7/1/2018

Example: 11/4/2019

\* End date: ?

11/4/2019

Example: 11/4/2019

Run every:

Months

Filter: ?

CLASS=8788

Save

Save & Run

Cancel

# NOI: Related Events



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Configure Analytics x

View Related Events x

New [5] | Watched [0] | Active [1] | Expired [0] | Archived [0] |

Configuration

Name
ELENA_1
OFER
RE_TEST
SampleConfiguration
aaaa

Total: 9 Selected: 1

Group Sources

Name	Groups	Events
Unallocated Groups (RE_TEST)	2	7
RE_TEST_Suggestion0	1	3

Total: 2 Selected: 1

Groups

Name	Events	Instances	Reviewed
RE_TEST:2	3	138	No

Total: 1 Selected: 0

Events

Summary	Acknowledgements	Bp2icodeael	Node
Related Event Test Group 2 1	0	REAG	Node1
Related Event Test Group 2 2	0	REAG	Node2
Related Event Test Group 2 0	0	REAG	Node0



# NOI: Related Events



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Name
ELENA_1
OFER
RE_TEST
SampleConfiguration
aaaa
Total: 9 Selected: 1

Name	Groups	Events
Unallocated Groups (RE_TEST)	2	7
RE_TEST_Suggestion0	1	3
Total: 2 Selected: 1		

Name	Events	Instance	Reviewed	Acknowledged
RE_TEST:0	3	134	No	0
RE_TEST:1	4	136	No	0
Total: 2 Selected: 0				

Events

Summary	Acknowledgements	Bp2icodeael	Node
Related Event Test Group 1 0	0	REAG0	Node0
Related Event Test Group 1 2	0	REAG2	Node2
Related Event Test Group 1 1	0	REAG1	Node1
Related Event Test Group 0	0	RelatedEventsAG0	RelatedNode0
Related Event Test Group 1	0	RelatedEventsAG1	RelatedNode1
Related Event Test Group 2	0	RelatedEventsAG2	RelatedNode2
Related Event Test Group 3	0	RelatedEventsAG3	RelatedNode3

# NOI: Related Events



Presenter: Elena Mititelu

## Configure event suppression

Event suppression is available as one of the actions when creating a seasonal event rule. The field and value you define here will be used to mark the event for suppression when the incoming event matches the seasonal event rule with event suppression selected as one of its actions.

By default it is used SuppressEscl field

### Modify Existing Rule

\* Rule Name

TEST\_OCT

Event(s) Selected: Link Down: Lost Carrier ( GigabitEth...

☐ Select all related events [0]

Edit Selection...

Time Condition(s) ?

☒ AND ☐ OR

Day of Week

Is

Wednesday

Actions When Event(s) Occurs in Specified Time Window(s)

Perform Action(s) on Event Occurrence

☒ Suppress event(s)

☐ Set Column Values...

Perform Action(s) After

20

Hours

☒ Unsuppress event(s)

☐ Set Column Values...

Actions When Event(s) Does Not Occur in Specified Time Window(s)

Perform Action(s) After

20

Hours

***Thank You!***

**Q&A**