CA OPS/MVS New Features and Roadmap

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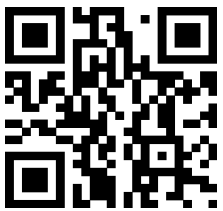
Session OB



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CA OPS/MVS Release Overview

- OPS/MVS 13.0
  - Complete GA Released on November 13, 2017
- OPS/MVS 13.5
  - Incremental GA released February 2018
  - Tentatively scheduled February 2020 for Complete Release
- Automation Point 11.6
  - Complete GA released January 17, 2019
  - 11.6.1 Service Pack Released September 2019

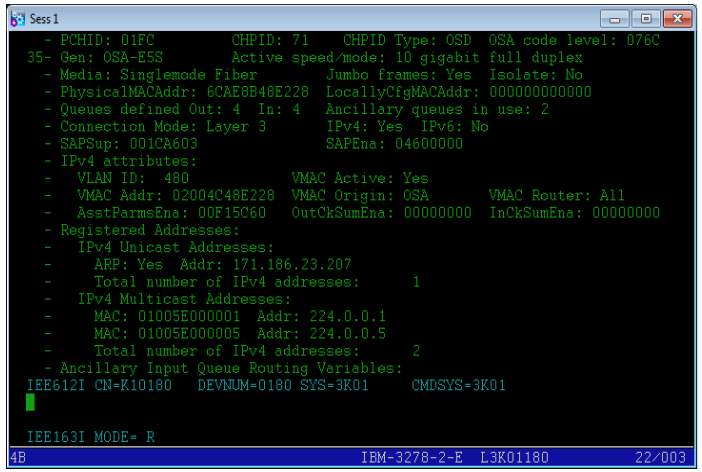
Automation Point 11.6 New Features

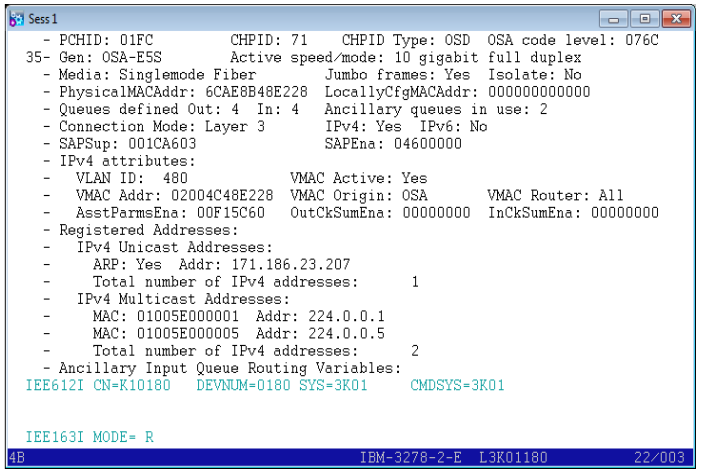
- Expanded the number of 3270 console connections supported per AP instance from 64 to 128
- Remove license check for 3270 option
- Reintegration of Distributed CCI w/TLS 1.2 support and removal of CCI PC
- Internalize SNMP trap support

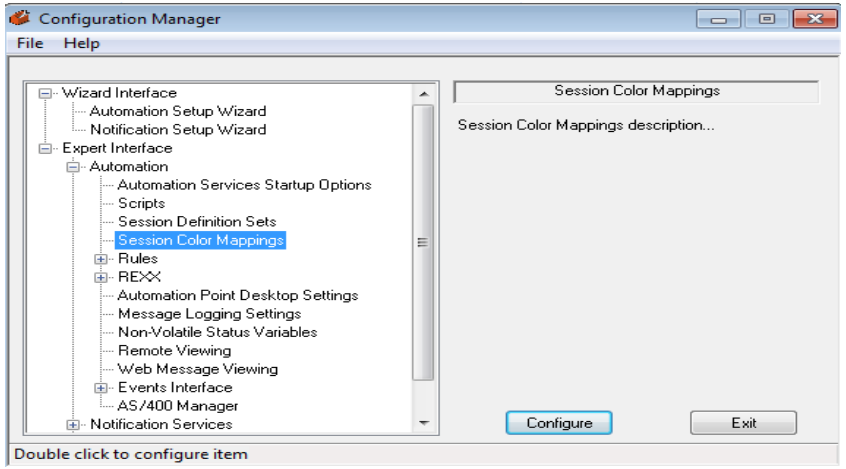
Remote Viewer Session Colorization

Automation Point 11.6

- Ability to change the background and text color at a session level within Remote Viewer.
- Allows Administrators to distinguish different types of system via color coding (Ex. Production and Test)

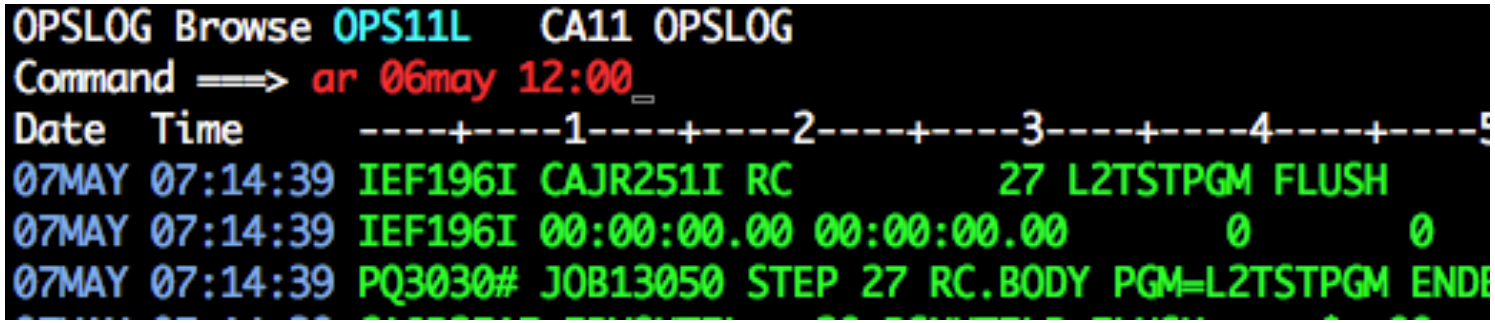






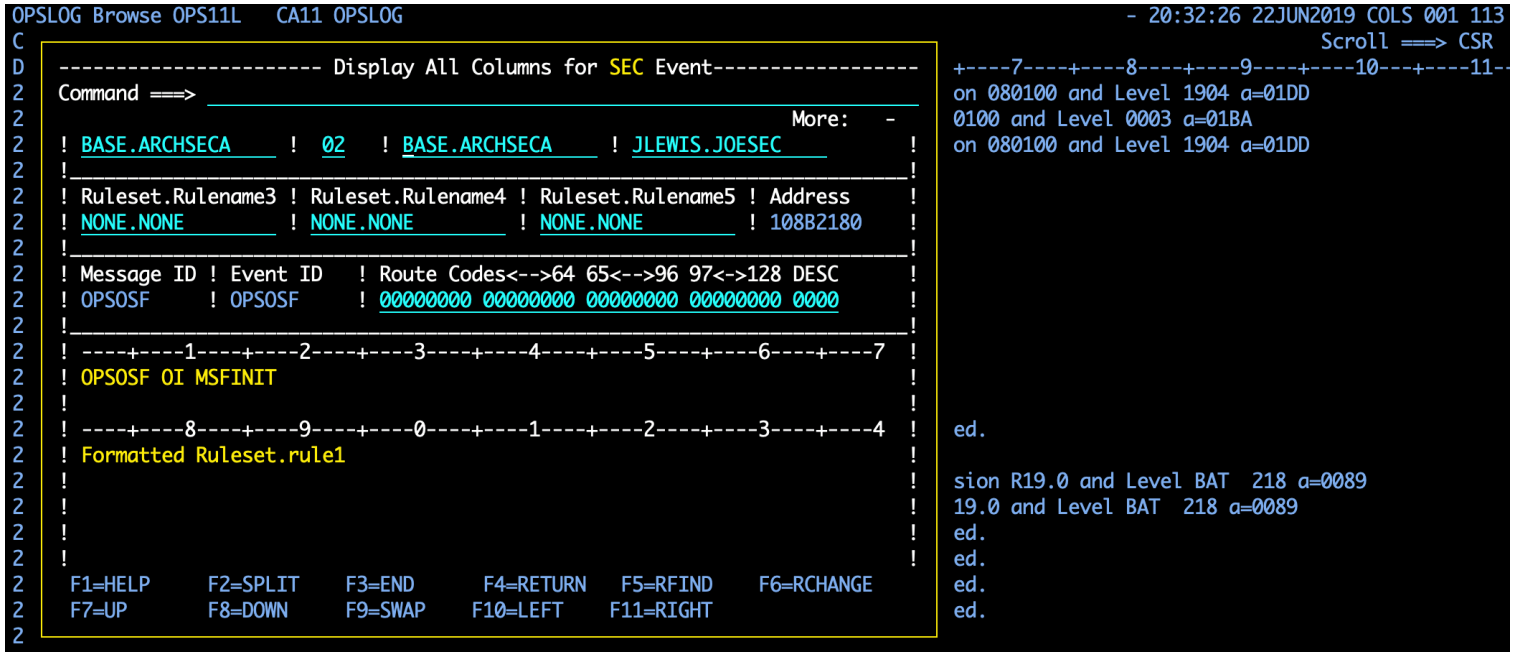
OPSLOG Archive Restore Improvements

- Primary Line command – ARCHREST
  - Syntax – ARCHREST *date time*
    - Date - a date (for example, 5APR87, 5APR, 05APR1987)
    - Time - a time in hh:mm:ss format (for example, 11:, 11:00, 11:00:00)
  - Automatically find the correct Archive Dataset and drop you right in the restore panel



OPSLOG Rule Point and Shoot

- Allows for quickly viewing / editing rules associated with a message displayed in the OPSLOG
- In the ”All Columns” display the Ruleset.Rulename entries can be clicked on to jump directly into the rule



Integration with Service Management Products

- Products Supported
  - CA Service Desk Manager
  - ServiceNow
  - ServiceAide
  - HP Service Manger
  - SAP Solution Manager ITSM
  - Salesforce Service Cloud
  - BMC Remedy

Example 1: Open an incident with ServiceNow.

This command opens an incident with third-party service management product ServiceNow. It waits for a maximum of 90 seconds to receive a response, and stores the response in the REXX stem variable named OUT.

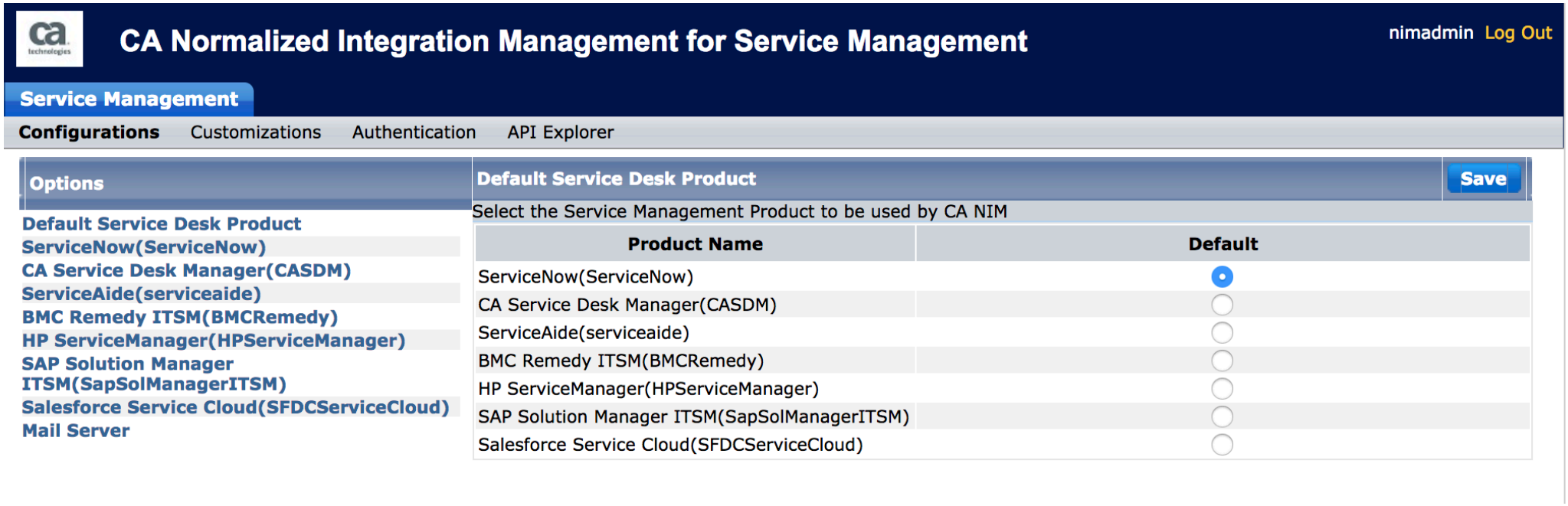
```
ADDRESS USS "SMREQ name('SMREQ sample') description('ServiceNow') Service(ServiceNow) stem(out.) wait(90)"
```

- Ability to Open Tickets via Address USS Command SMREQ
  - Fields vary depending on product
  - Examples: Assignment Group, Description, Impact, Urgency, Priority, Type, Impacted User
- When ”stem” keyword specified returned output includes
  - Ticket Number
  - URL to launch in context

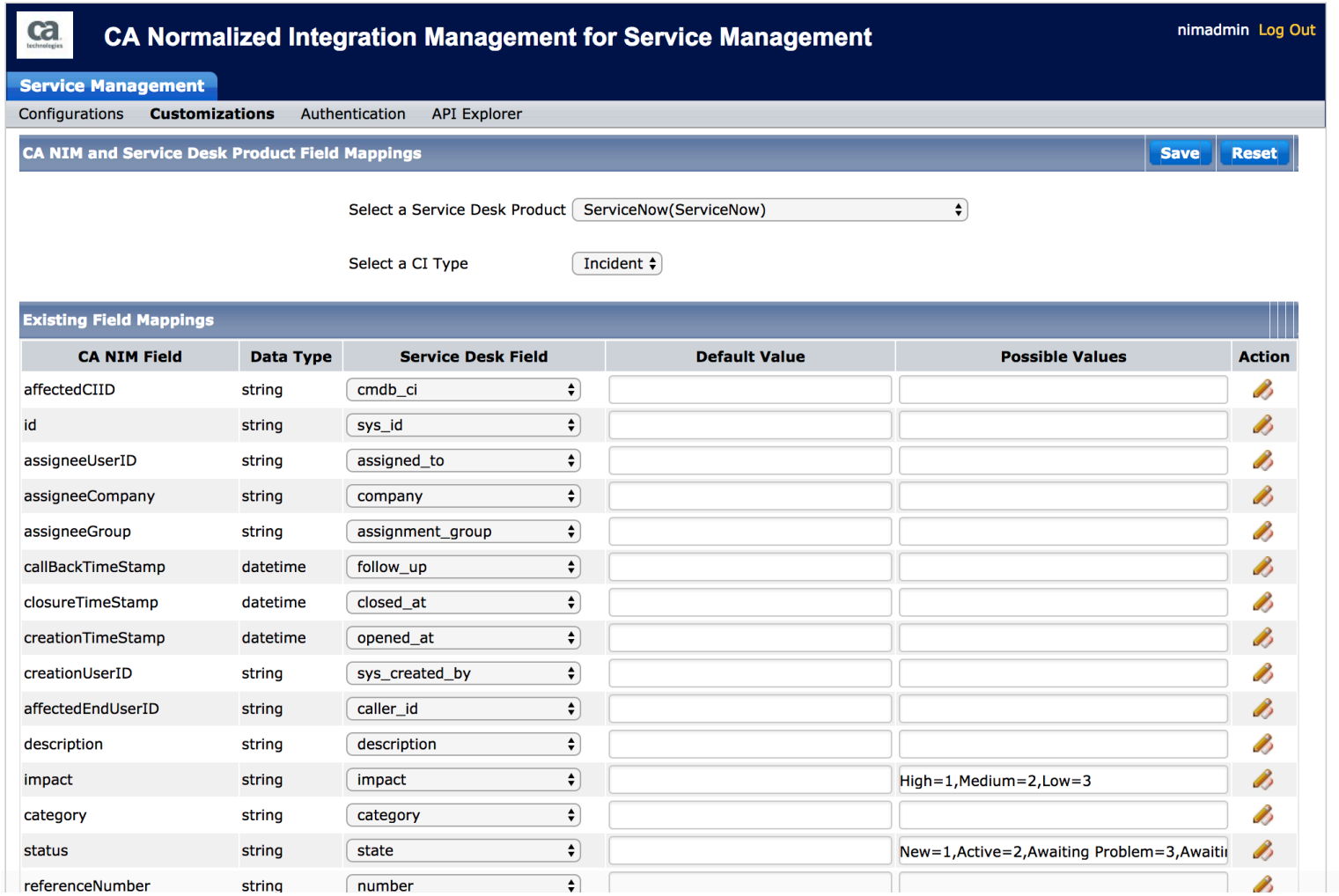
CA Normalized Integration Management for Service Management

- Allows abstraction of Service Management product
- Quickly convert between products without having to change hundreds of OPS/MVS Rules and/or REXX programs
- OPS/MVS configuration allows for multiple NIM SM deployments
  - Mainframe Local, Mainframe Remote, Distributed
- SMREQ keywords allow for
  - Addressing default NIM SM based upon USS Service configuration
  - Addressing a command specific NIM SM
  - Looping through multiple NIM SM's until successful

CA NIM SM Product Selection



CA NIM SM Product Configuration



Integration with Netcool

- New USS command “NCREQ” to send messages over to Netcool
- Alert Status Table must be defined to configured to defined Schema Name Pairs

```
/* OPNCREQ - sample rexx program to create NetCool alert */
   CEC        = WORD(OPSIPL(LOAD,HWNAME),2)
   LPAR      = WORD(OPSIPL(LOAD,LPARNAME),2)
   NODE     = CEC || '.' || LPAR
   ADDRESS USS "NCREQ" ,
                    "Identifier(NCREQ Sample Alert)",
                   "Summary(Sample alert from OPSREXX)",
                   "Type(1)",
                   "First(*) Last(*),",
                   "Agent(OPS/MVS)",
                   "Expire(120)",
                   "EventID('NCREQ Sample')",
                   "Manager('OPS/MVS testing')",
                   "AlertGroup(z/OS Systems)",
                   "Node(" || NODE || ")",
                  "STEM(OUT.)"
 /* Display the output */
 SAY "Ouput from NCREQ command:"
 DO I = 1 to OUT.0
    SAY out.i
    END
```

NCREQ Example Output

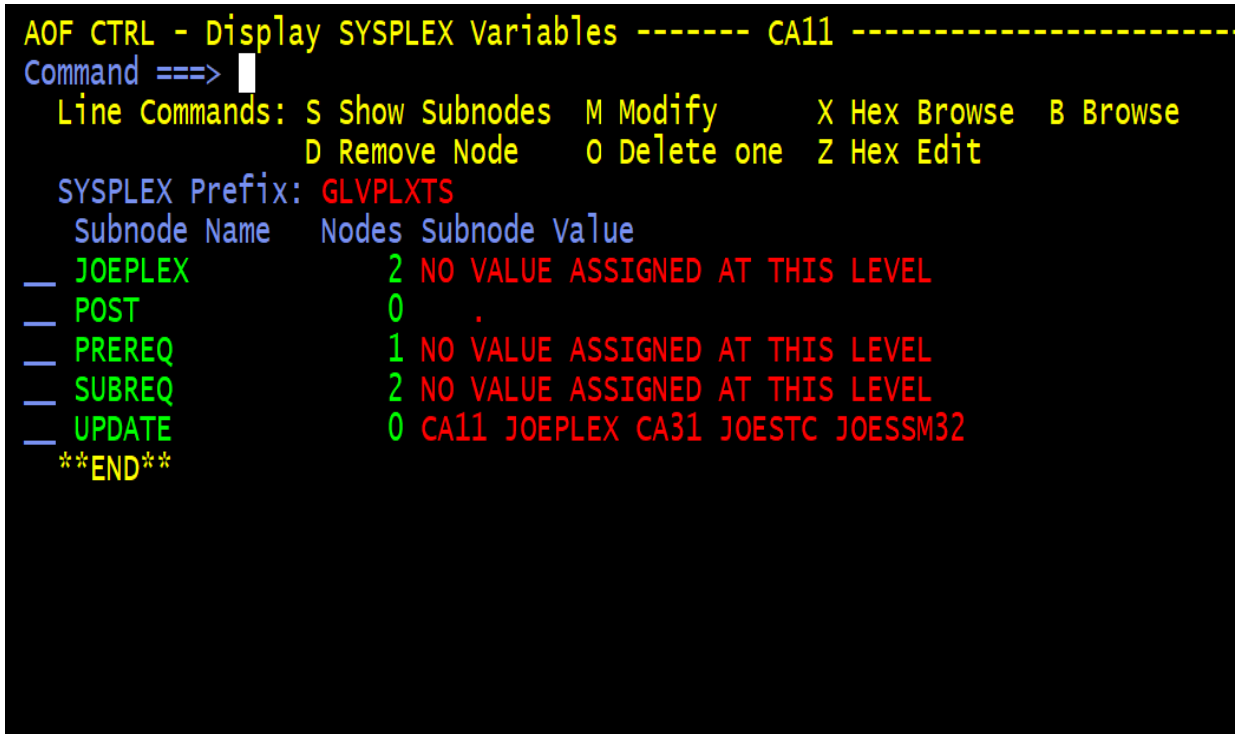
```
NCREQ.RESPONSE.HTTPCODE='HTTP/1.1 201 Created'
NCREQ.RESPONSE.URI='http://OpsNetCool1.ca.com:8080/objectserver/restapi/alerts/status/kf/8626%3ANCOMS'
NCREQ.RESPONSE.Identifier='NCREQ Sample Alert'
NCREQ.RESPONSE.Serial='8626'
NCREQ.RESPONSE.Node='CEC1.LPAR1'
NCREQ.RESPONSE.Manager='OPS/MVS testing'
NCREQ.RESPONSE.Agent='OPS/MVS'
NCREQ.RESPONSE.AlertGroup='z/OS Systems'
NCREQ.RESPONSE.Severity='1'
NCREQ.RESPONSE.Summary='Sample alert from OPSREXX'
NCREQ.RESPONSE.StateChange='1556708884'
NCREQ.RESPONSE.FirstOccurrence='1556708883'
NCREQ.RESPONSE.LastOccurrence='1556708883'
NCREQ.RESPONSE.InternalLast='1556708884'
NCREQ.RESPONSE.Type='1'
NCREQ.RESPONSE.Tally='1'
NCREQ.RESPONSE.EventId='NCREQ Sample'
NCREQ.RESPONSE.ExpireTime='120'
NCREQ.RESPONSE.ServerName='NCOMS'
NCREQ.RESPONSE.ServerSerial='8626'
```

Integration with Zowe CLI

- Allows OPS/MVS functionality from a desktop command line
- Secured through existing Mainframe credentials and security implementation
- Base set of commands for AOF Rules and System State Manager
  - bright ops disable rule api reqrule1
  - bright ops enable rule api reqrule1
  - bright ops show rule api reqrule1 –status
  - bright ops show resource cics –state
  - bright ops start resource cics
  - bright ops stop resource cics

Sysplex Global Variables Update

- Accessible via OPSVIEW 4.8 Panel
  - GLVPLXTx is the prefix for temporary variables
  - GLVPLXPx is the prefix for permanent variables

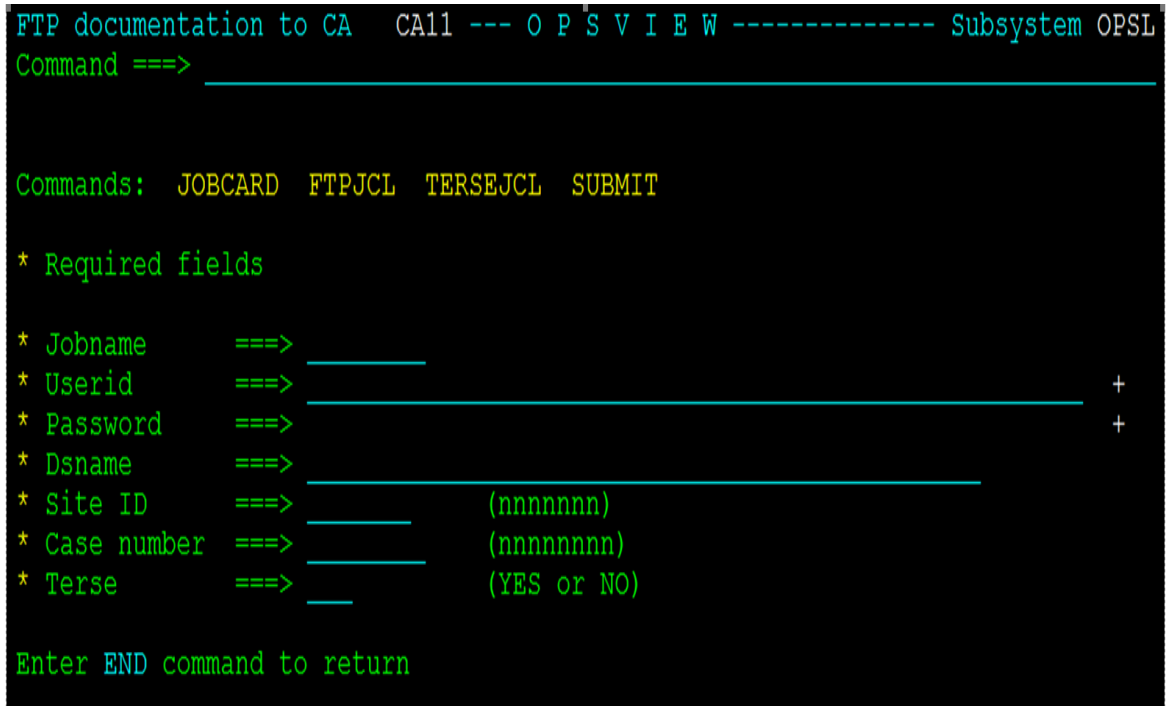


Direct IBM BCPii Integration

- Replaces HiSrv functionality
- New BCPii server is an OPS/MVS STC - like the OPS/MVS OSF or USS servers
- ADDRESS HWS host environment Commands
  - Command syntax is the unchanged
- SENDCMD command lets you execute a specific hardware command for a specific target
  - ADDRESS HWS "SENDCMD CMDTEXT('DEACTIVATE FORCE=YES’) ENTITY(LPAR('SAMPLE1') CPC('IBM.MACHINE.SAMPLE'))"
- Get System Attribute Command
  - Address HWS "Getattr attr('"CPCVERSION”’) Entity(cpc('IBMXXXXX.YYYY’)) Refresh(yes) Debug(yes) Timeout(5)"
- Update System Attribute Command
  - Address HWS “Setattr attr('"SGPIPW"') ATTRVAL(46) Entity(Ensemble('IBMXXXXX.YYYY’) CPC('IBMXXXXX.YYYY’) lpar('"SYS1”’)) Debug(yes) Timeout(10)”

Miscellaneous Update

- “FTP to CA”
  - ISPF interface to quickly collect documentation and FTP them to a CA Support Case



- Ability to define “Same-Name” Resources within SSMGAv2

Planned

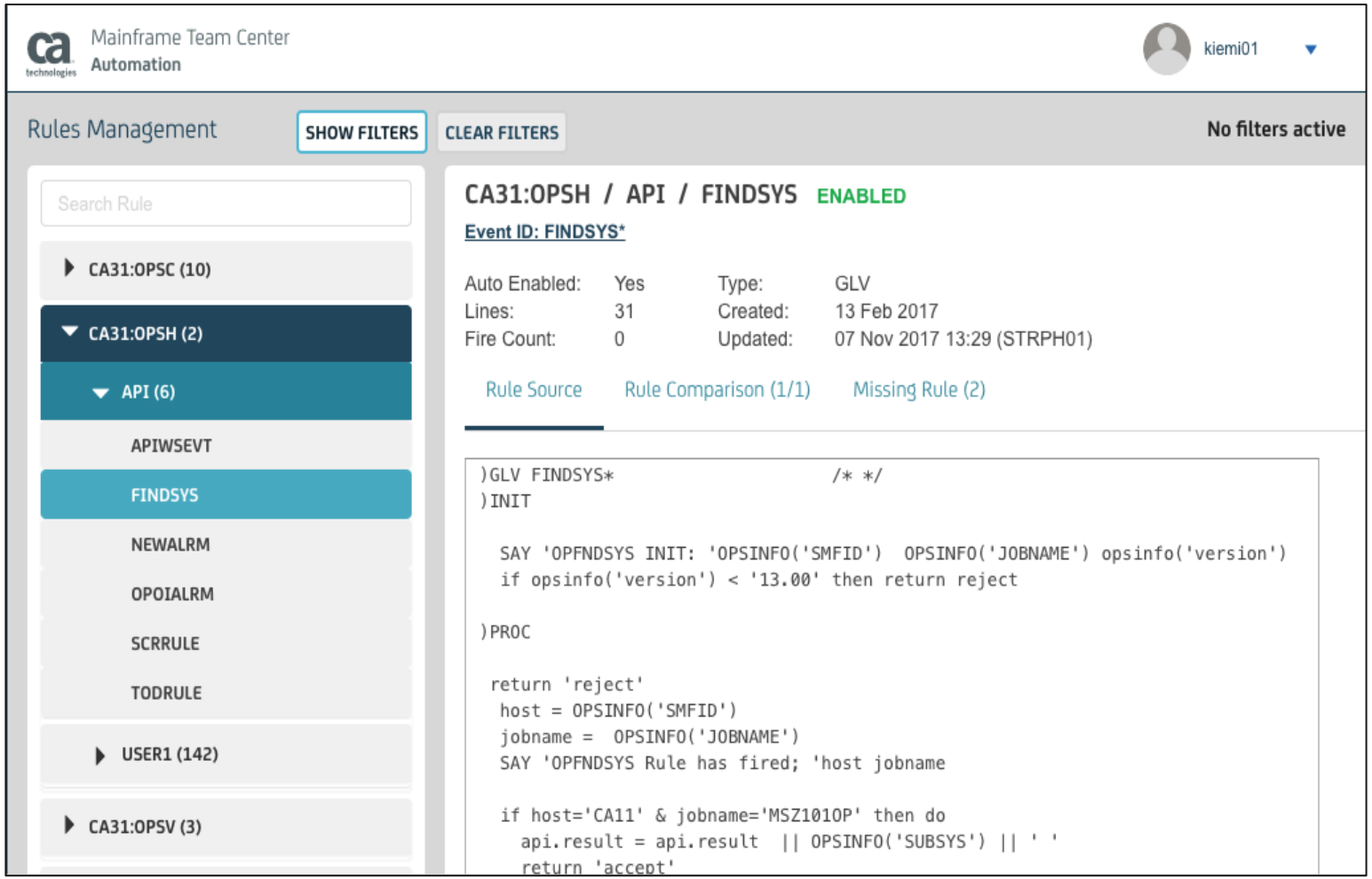
Feature	Description	Benefit
Notification Manager Voice Card	Automation Point currently supports Dialogic Cards for phone calls. We will be looking to support other cards increasing the customer options when using this functionality	Allows greater flexibility for hardware support and the ability to use a virtual server with voice notification support.
Automation Point Recoverability	Expand the functionality allowing for automated failover between instances	Reduction in downtime resulting from maintenance or system failover.

Mainframe Team Center

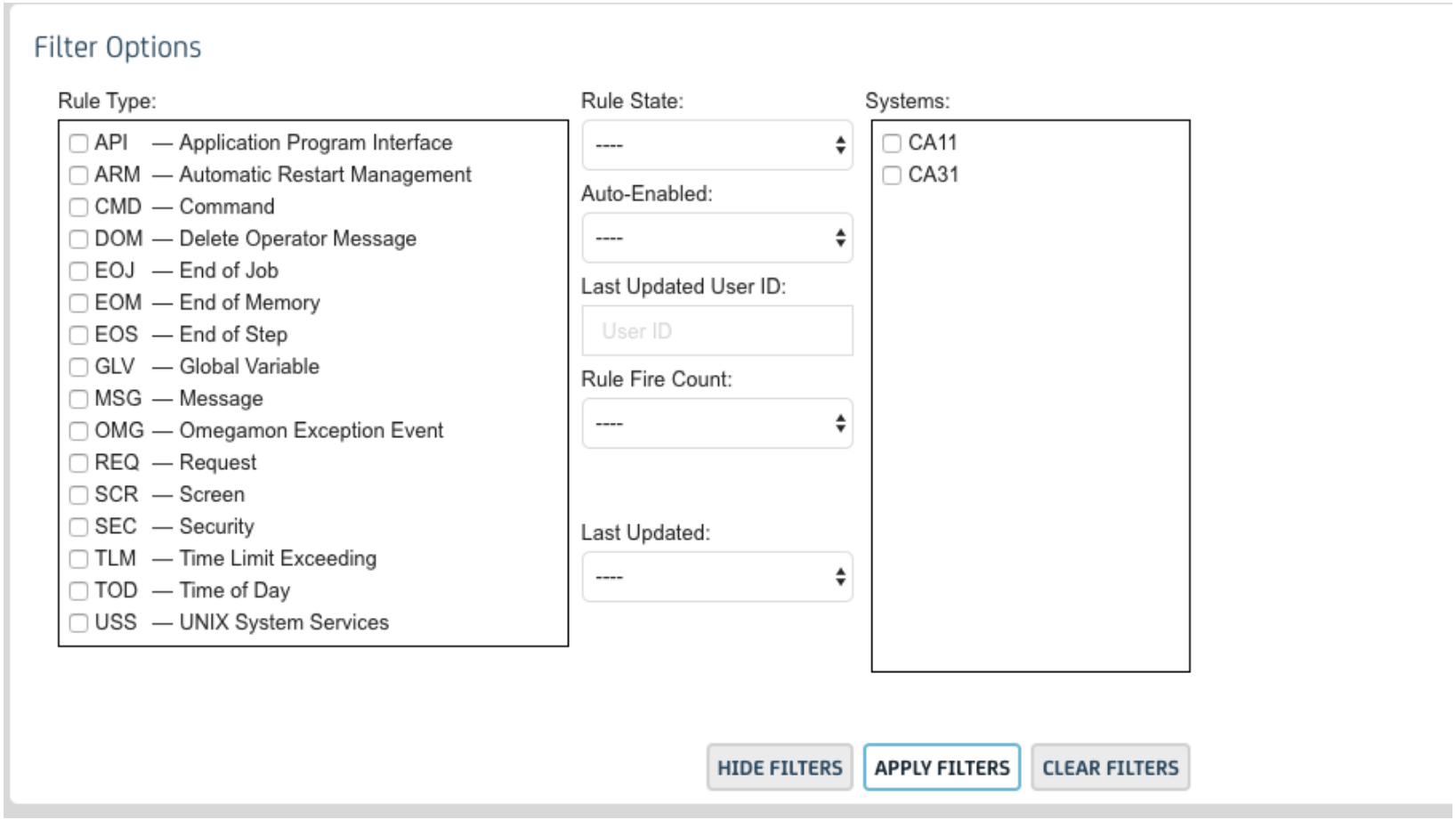
RULES MANAGEMENT

- View rules from all your LPARs in a single location
- Quick Search Capabilities

- Installed in USS
- Uses CA Common Services communication to expand beyond SYSPLEX

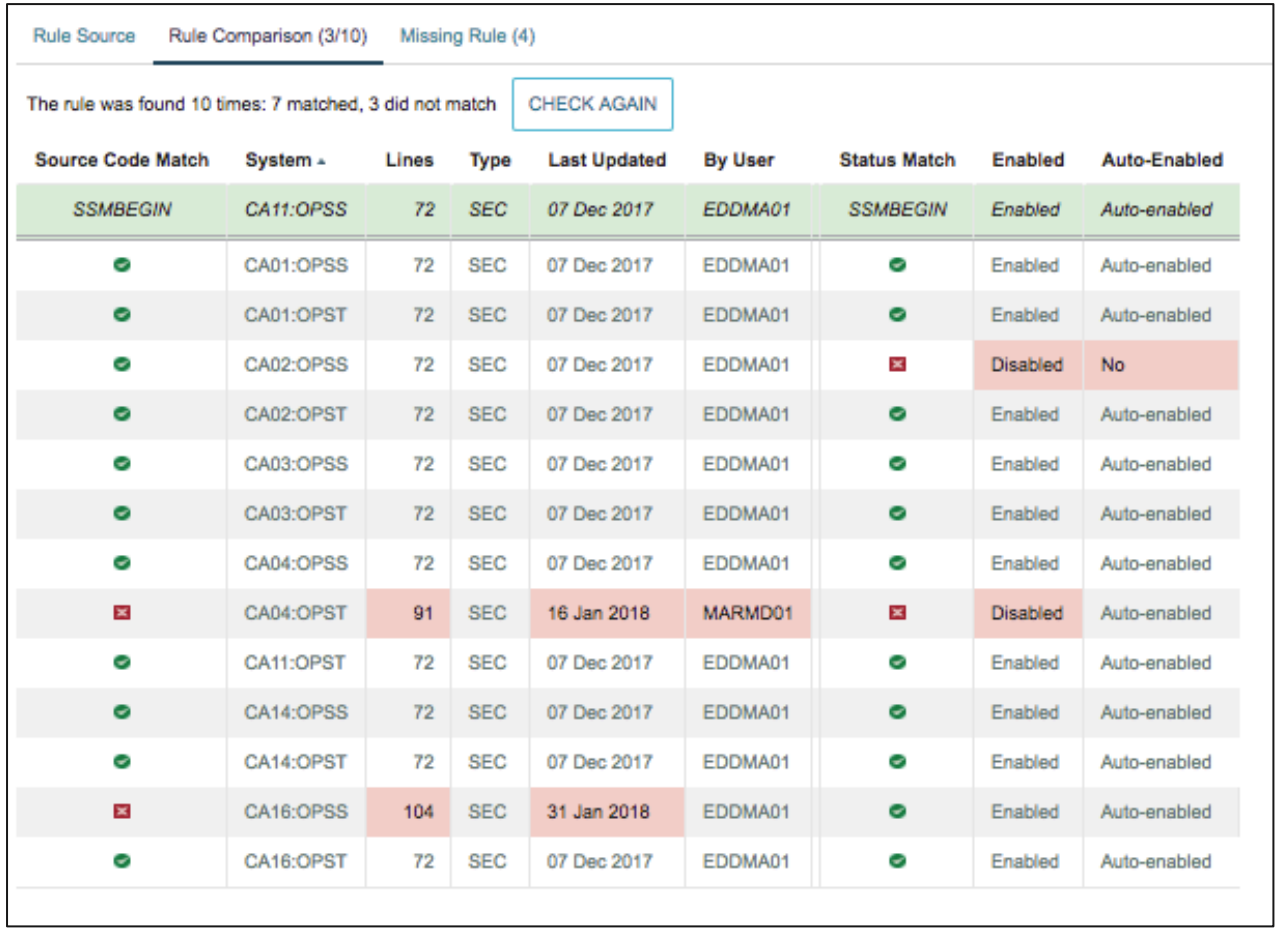


Rules Filtering



- **Rule Type**
  - Limit display to specific types of Rules
- **Systems**
  - Limit to a subset of systems
- **Rule State**
  - Enabled / Disabled?
- **Auto-Enabled**
  - Yes / No?
- **Last Updated User Id**
  - Who changed it?
- **Rule Fire Count**
  - Greater or Less than a value
- **Last Updated**
  - Specific Date, Before, After, or Range

Rules Comparison



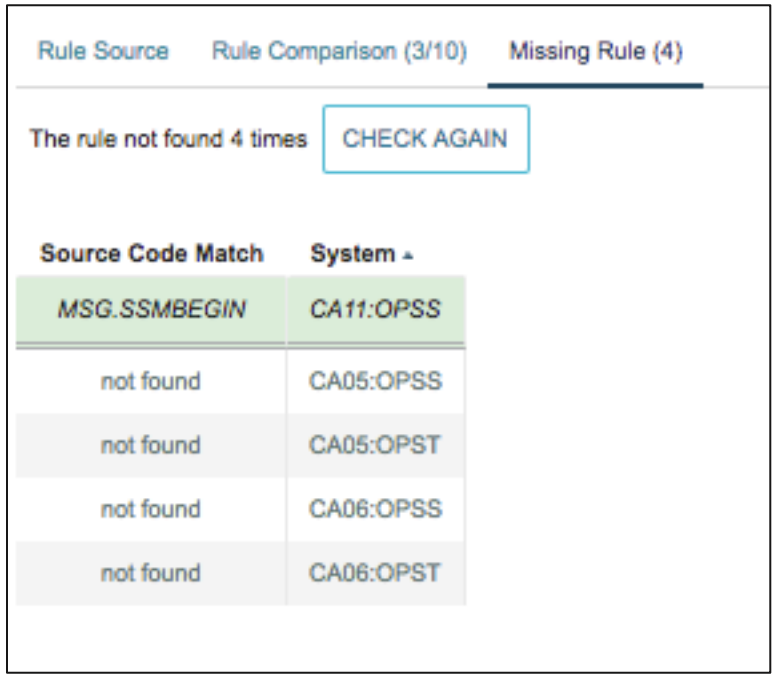
Rule Source | Rule Comparison (3/10) | Missing Rule (4)

The rule was found 10 times: 7 matched, 3 did not match — CHECK AGAIN

Source Code Match	System	Lines	Type	Last Updated	By User	Status Match	Enabled	Auto-Enabled
SSMBEGIN	*CA11:OPSS*	*72*	*SEC*	*07 Dec 2017*	*EDDMA01*	*SSMBEGIN*	*Enabled*	*Auto-enabled*
✓	CA01:OPSS	72	SEC	07 Dec 2017	EDDMA01	✓	Enabled	Auto-enabled
✓	CA01:OPST	72	SEC	07 Dec 2017	EDDMA01	✓	Enabled	Auto-enabled
✓	CA02:OPSS	72	SEC	07 Dec 2017	EDDMA01	✗	Disabled	No
✓	CA02:OPST	72	SEC	07 Dec 2017	EDDMA01	✓	Enabled	Auto-enabled
✓	CA03:OPSS	72	SEC	07 Dec 2017	EDDMA01	✓	Enabled	Auto-enabled
✓	CA03:OPST	72	SEC	07 Dec 2017	EDDMA01	✓	Enabled	Auto-enabled
✓	CA04:OPSS	72	SEC	07 Dec 2017	EDDMA01	✓	Enabled	Auto-enabled
✗	CA04:OPST	91	SEC	16 Jan 2018	MARMD01	✗	Disabled	Auto-enabled
✓	CA11:OPST	72	SEC	07 Dec 2017	EDDMA01	✓	Enabled	Auto-enabled
✓	CA14:OPSS	72	SEC	07 Dec 2017	EDDMA01	✓	Enabled	Auto-enabled
✓	CA14:OPST	72	SEC	07 Dec 2017	EDDMA01	✓	Enabled	Auto-enabled
✗	CA16:OPSS	104	SEC	31 Jan 2018	EDDMA01	✓	Enabled	Auto-enabled
✓	CA16:OPST	72	SEC	07 Dec 2017	EDDMA01	✓	Enabled	Auto-enabled

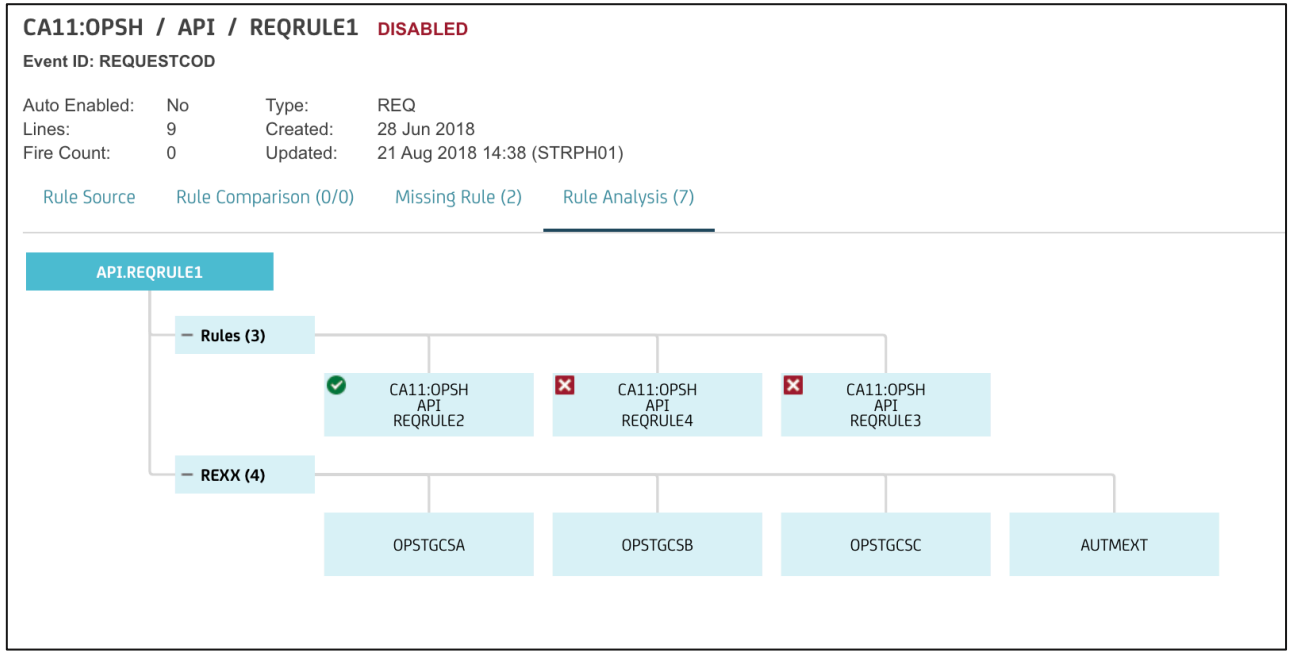
- Quickly determine where rules across multiple systems are identical
- Selects rules based on RULESET.RULENAME

Missing Rules



- Quickly determine if rules do not exist across multiple systems
- Selects rules based on RULESET.RULENAME

Rule Analysis Tree



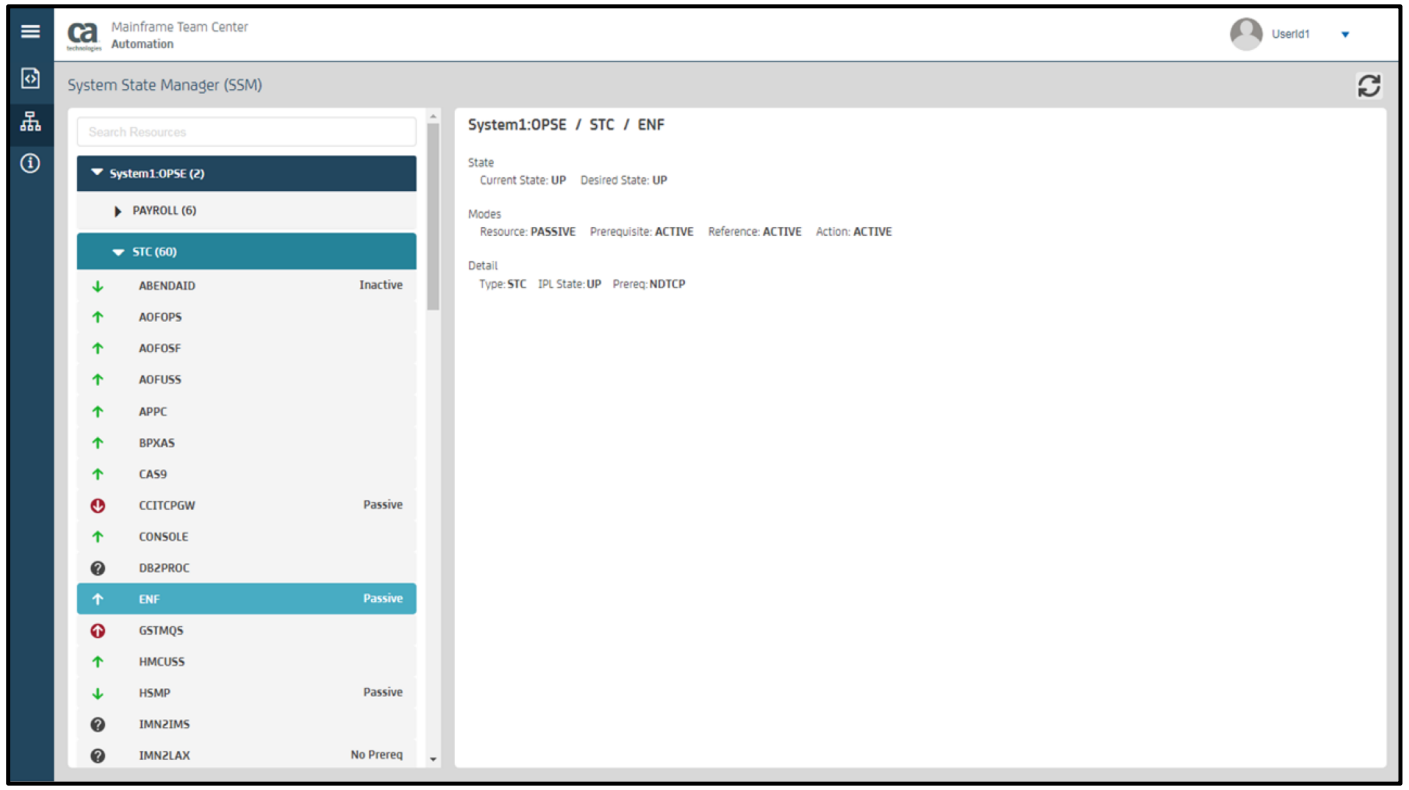
Quickly determine what components a rule utilizes

- REXX Programs
- AOF Rules

Planned Future Enhancements

- Global Variables
- Sysplex Variables
- RDF Tables

SSM Resource Operational View

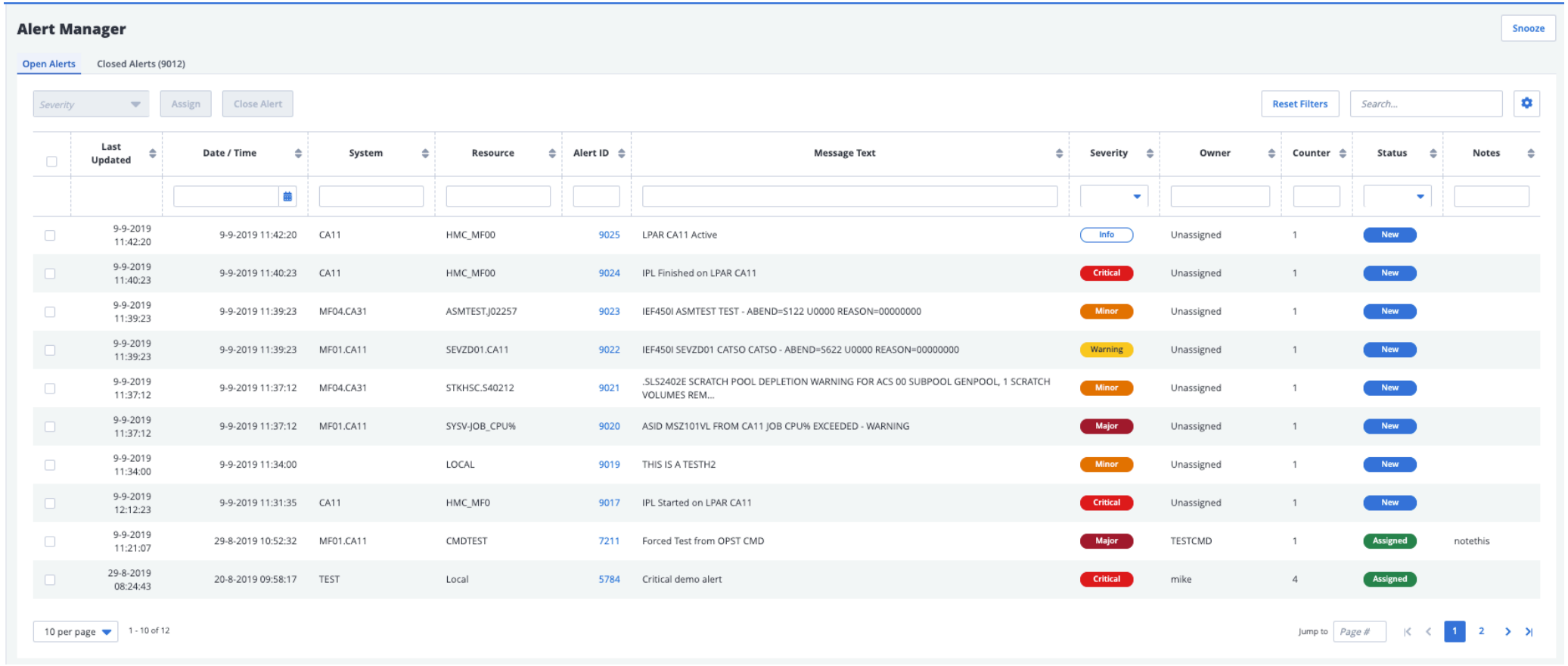


- Quickly view SSM Resources across Mainframe Environment
- Quickly determine status via visual indications
- Ability to switch between SSM and Rules Management

Miscellaneous Updates

- MTC-A Data Synchronization
  - Allow changes to Rules to be automatically syncs to MTC-A Database instead of relying on timer
- Display Disabled Rules
  - Allow MTC-A to display both Enabled and Disabled Rules
  - Added new Address AOF function “LISTSRCD” allowing users access to this data via REXX

MTC-A Alert Manager



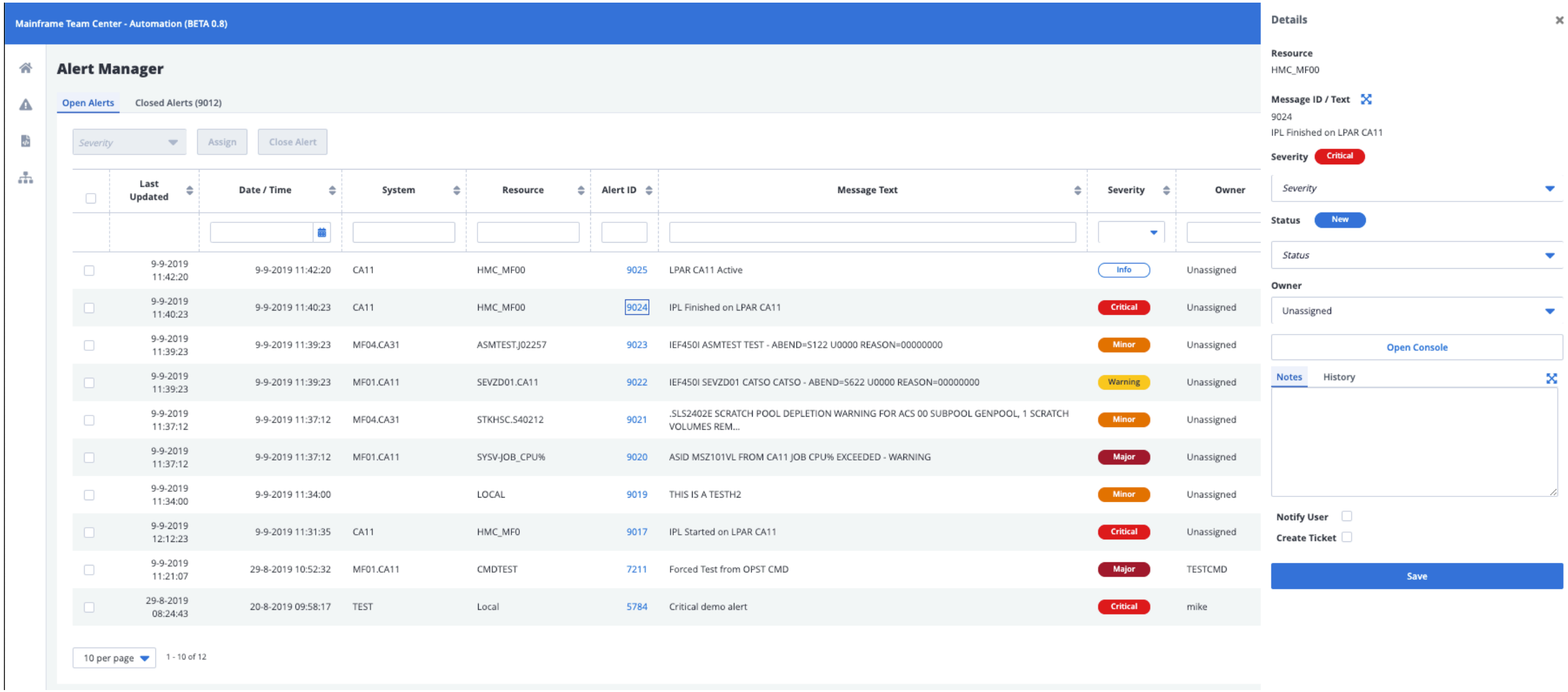
Receives Alerts From:

- OPS/MVS command
- Automation Point Rule
- Restful API

Alert Severity Levels:

- Critical
- Major
- Minor
- Warning
- Info

MTC-A Alert Manager



MTC-A Alert Manager Rexx Functions to Create Alerts

- OPS/MVS REXX function to send alerts via MSF Link.

```
ADDRESS AP ALERT
           SYSTEM(apname)
           RESOURCE(rsc)
           DESCRIPTION(desc)
           [NOTE(note)]
           [OWNER(own)]
           [SEVERITY(CRITICAL | HIGH |MEDIUM | LOW | INFO)]
           [AGENT(agnt)]
           [EXPIRATION(NEVER | DAYS(dd) | HOURS(hh) | MINUTES(mm))]
           [CUSTOM(col1(val1) col2(val2) …)]
           [DEBUG(YES | NO)]
```

- Automation Point Rules Format

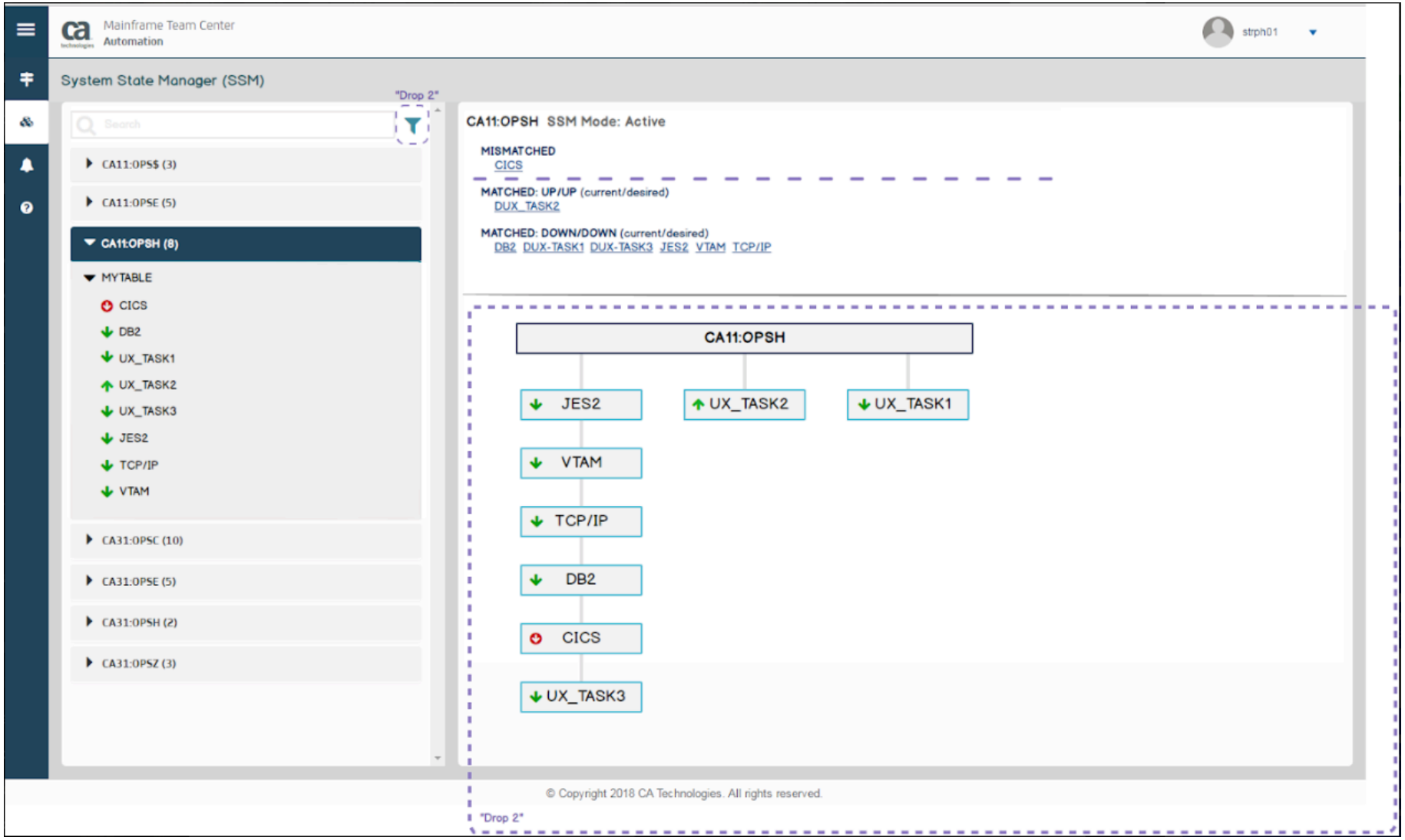
```
AMSCREATE(SEVERITY(<severity 1-5>) RESOURCE(<resource id>) [SYSTEM(system id)] [DESC(<description>)]
[OWNER(<owner id>)] [EXPIRE(<NEVER|DAYS(<number>|HOURS(<number>)|MINUTES(<number>))])
```

- Automation Point REXX Function

```
ADDRESS AMS 'CREATE SEVERITY(<1-5>) RESOURCE(<resource_id>)
        [SYSTEM(<sys_id>]
        [DESC(<description>)]
        [OWNER(<owner_id>)]
        [NOTES(<notes>)]
        [EXPIRATION(<NEVER|DAYS(<number>)|HOURS(<number>)|MINUTES(<number>)>)]'
```

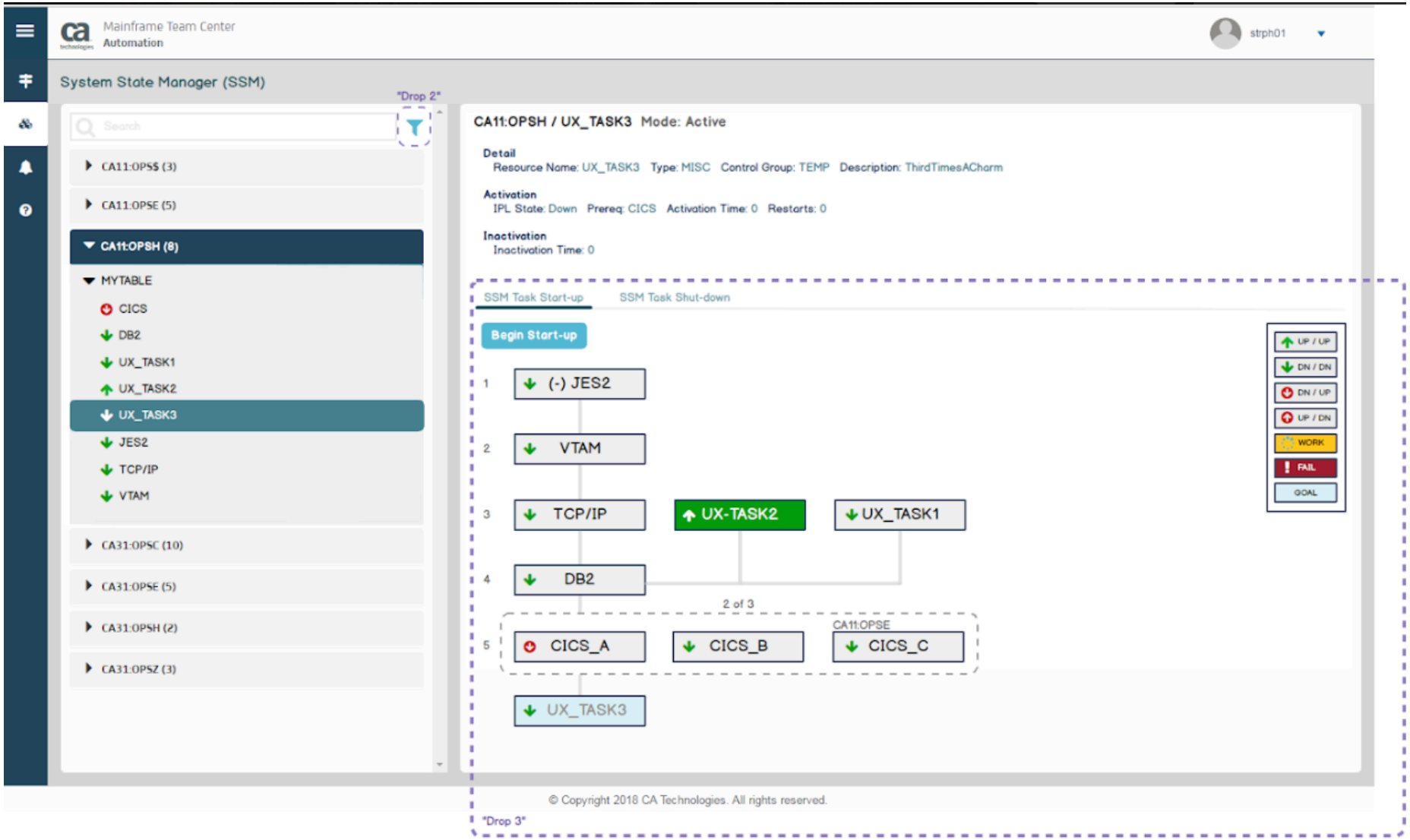
MTC-A System State Manager Wireframe

System Level View



MTC-A System State Manager Wireframe

Resource Level View



Under Consideration

Feature	Description
Expanded Rules Management	Mainframe Team Center – Automation is currently limited to AOF Rules. This would expand the existing functionality to OPS/REXX members, Global Variables, and Parameters
Expanded Search	Current rules management search is limited to rule names. This would expand that functionality to include the rules text and the rule specifier
Operational and Management Reports	Generate ad-hoc or scheduled reports based upon your enterprise-wide mainframe automation environment
System State Manager Administration	Add, Modify, and Delete resources from System State Manager across the your mainframe environment
Rules and Rexx Administration	Ability to maintain Rules and REXX within modern development tools. Additionally deploy / back-off changes across your mainframe environment from a single location

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1 2 3 4 5 6 7 8 9

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1 2 3 4 5 6 7 8 9