SABRE SESSION HOUSEKEEPING (NORM OAA)

Version
1.3 (Last update: 2015-02-20)

Keywords
SOAP API, Web services, Sabre, Norm OAA, AAA, clear, session management, SessionCreateRQ

Context
System maintenance requires every active Sabre user to log out and log in again once a week. Sabre SOAP API subscribers using session management systems that maintain full-time Web service sessions must detect the start of the maintenance program and take action to preserve open sessions.

Problem
An application known as NORM OAA is run system wide in Sabre every Sunday morning at 00:15 Central Time. NORM OAA takes about 5 minutes to run worldwide and clears every AAA in Sabre including those used by SOAP API customers. All logged-in Sabre users are required to log out and log in again once NORM OAA begins to run. NORM OAA begins at 00:15 CT with a 5-minute warning period during which any Sabre entry returns a notice that system housekeeping is about to run.

Indications
SOAP API calls issued during the warning period that precedes NORM OAA will return a warning that system housekeeping is underway:

SYSTEM HOUKPING REQUIRES AAA TO BE CLEARED
RE-ENTER LAST INPUT THEN COMPLETE OR
END TRANSACTIONS IN ALL AREAS
ENTER SOALL WITHIN 04 MINUTES AND THEN
SIGN BACK IN TO CONTINUE WORKING

After the warning period, open sessions will be closed by NORM OAA beginning at 00:20 CT. Requests made during this time will return the error:

SYSTEM HOUKPING - ALL AREAS SIGNED OUT
SIGN BACK IN TO CONTINUE WORKING

New PNRs that have not been ended will be lost. Changes made to PNRs that have not been ended will also be lost. The next SOAP API call using the binary security token returned before NORM OAA ran will return an Invalid or Expired Security Token error (USG_INVALID_SECURITY_TOKEN).

Note: This does not apply to sessions or changes made after 10:00 CT on Saturdays
Solution

To avoid Invalid Security Token errors caused by NORM OAA you close and reopen all pooled sessions between 10:00 AM and 12:00 Midnight U.S. Central Time on Saturday. You do not need to receive the housekeeping warning message as long as the action occurs within the 10:00 to 24:00 CT window on Saturday before the NORMOAA process runs. Pooled sessions not in use may be closed (SessionCloseRQ) and reopened (SessionCreateRQ) any time during the Saturday 10:00-24:00 window.

Please note: If a pooled session is in use the state of any transaction in progress must be persisted locally or it will be lost. If a booking is in progress, end transaction to preserve changes, close and open the session, and retrieve the PNR to continue. The recommended procedure is to close and re-open unused sessions from the pool.

Examples

When a SOAP API call is issued during the 5 minute warning period before NORM OAA runs (00:15-00:20 CT) a warning will be returned. Here is a sample response payload to an OTA_AirAvailRS request:

```xml
<?xml version="1.0" encoding="UTF-8"?>
<OTA_AirAvailRS xmlns="http://webservices.sabre.com/sabreXML/2003/07"
xmlns:xs="http://www.w3.org/2001/XMLSchema"
xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance">
  <Errors>
    <Error ErrorCode="SessionFailure-103" Severity="High" ErrorMessage="Parameter not supported">
      <ErrorInfo>
        <Message>SYSTEM HOUSKPING REQUIRES AAA TO BE CLEARED RE-ENTER LAST INPUT THEN COMPLETE OR END TRANSACTIONS IN ALL AREAS ENTER SOALL WITHIN 04 MINUTES AND THEN SIGN BACK IN TO CONTINUE WORKING</Message>
      </ErrorInfo>
    </Error>
  </Errors>
</OTA_AirAvailRS>
```

The highlighted text within the <Message> child of <ErrorInfo> will vary from 01 to 05 based on the time remaining before NORM OAA begins.

If a SOAP API call is issued while NORM OAA is running (00:20 to approximately 00:25 CT) you may receive an error that looks like this:

```xml
<?xml version="1.0" encoding="UTF-8"?>
<OTA_AirAvailRS xmlns="http://webservices.sabre.com/sabreXML/2003/07"
xmlns:xs="http://www.w3.org/2001/XMLSchema"
xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance">
  <Errors>
    <Error ErrorCode="SessionFailure-103" Severity="High" ErrorMessage="Parameter not supported">
      <ErrorInfo>
        <Message>SYSTEM HOUSKPING - ALL AREAS SIGNED OUT SIGN BACK IN TO CONTINUE WORKING</Message>
      </ErrorInfo>
    </Error>
  </Errors>
</OTA_AirAvailRS>
```

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SOAP API calls issued after NORM OAA runs will return a SOAP fault similar to this:

```xml
<soap-env:Body>
  <soap-env:Fault>
    <faultcode>soap-env:Client.InvalidSecurityToken</faultcode>
    <faultstring>Invalid or Expired binary security token: Shared/IDL:IceSess\SessMgr:1.0.IDL/Common!/ICESMS\RESA!ICESMSLB\RES.LB!-4248151653749447678!715048!0</faultstring>
    <detail>
      <StackTrace>com.sabre.universalservices.base.session.SessionException: errors.session.USR_INVALID_SECURITY_TOKEN</StackTrace>
    </detail>
  </soap-env:Fault>
</soap-env:Body>
```

This indicates that the session was closed by NORM OAA and the binary security token is no longer valid.

**Related Patterns**

None.