



California ISO

Technology User Group (TUG)

March 6, 2018

10:00 – 11:00 AM Pacific

TUG Agenda

Web Conference Information		Conference Call Information	
<i>URL</i>	https://caiso.webex.com/meet/twilliams	<i>Domestic Call-In</i>	(866) 528-2256
<i>Meeting Number</i>	966 010 353	<i>International Call-In</i>	(216) 706-7052
<i>Access Code</i>	389 588 9	<i>Access Code</i>	389 588 9

Time	Topic	Facilitator
10:00 – 10:05	Agenda and Roll Call	Thomas Williams
10:05 – 10:20	Update on Disabling TLS 1.0 and 1.1	Thomas Williams
10:20 – 10:40	OMS Status Messages	Thomas Williams
10:40 – 10:55	Disabling RAAM UI and API	Sandhya Balasubramanian
10:50 – 10:55	Adjourn	Thomas Williams

Disabling TLS 1.0 and 1.1

The ISO will disable TLS 1.0 and 1.1 in accordance with industry best practices for security and data integrity

MAP-Stage date

February 26, 2018 (DONE)

Production date

April 23, 2018

<https://ads.caiso.com:447/ADS/APIWebService/v6>

<https://ads.caiso.com:447/ADS/APIWebService/v7>

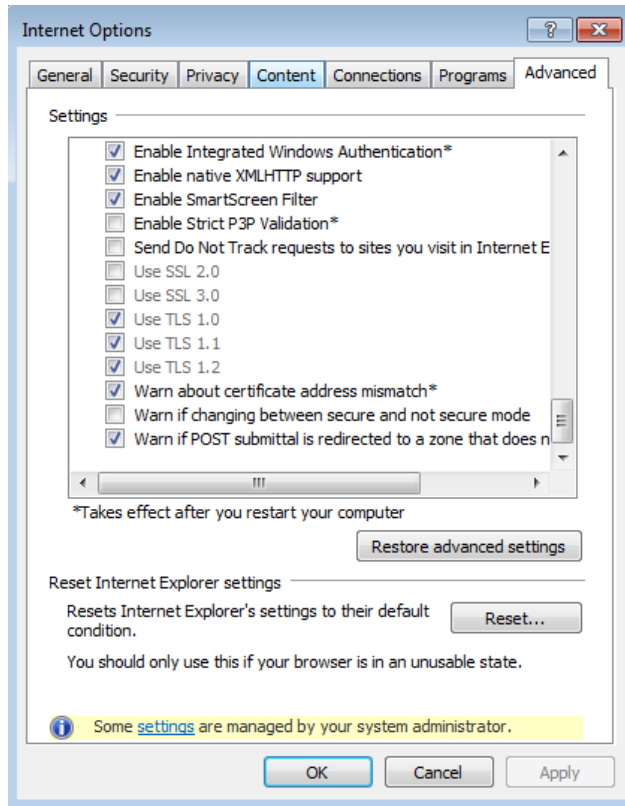
<https://portal.caiso.com/cmri/>

<https://ws.caiso.com/sst/cmri/>

The ADS **6.1.0.0** client is required for TLS 1.2 https://mpp.caiso.com/ads_install

Both v6 and v7 ADS APIs support TLS 1.2

TLS – How to Check Your Browser Settings



Browser settings might be managed by Group Policy

Make sure TLS 1.2 is enabled

It is okay to leave TLS 1.0 and 1.1 enabled because the client (browser) and server will always choose the highest mutually supported TLS version

Useful publicly available tool:
<https://www.howssmyssl.com/>

TLS – Idea for Checking Your API Settings

```
>> openssl s_client -tls1_2 -connect portalmap.caiso.com:443
...
CONNECTED(000001AC)
...
Certificate chain
 0 s:/C=US/O=caiso/OU=Device/OU=caisoserver/CN=portalmap.caiso.com
   i:/C=US/O=CAISO/OU=IT/CN=CAISO_ISSUING_CA
 1 s:/C=US/O=CAISO/OU=IT/CN=CAISO_ISSUING_CA
   i:/C=US/O=CAISO/OU=IT/CN=CAISO_Root_CA
 2 s:/C=US/O=CAISO/OU=IT/CN=CAISO_Root_CA
   i:/C=US/O=CAISO/OU=IT/CN=CAISO_Root_CA
...
subject=/C=US/O=caiso/OU=Device/OU=caisoserver/CN=portalmap.caiso.com
issuer=/C=US/O=CAISO/OU=IT/CN=CAISO_ISSUING_CA
...
Acceptable client certificate CA names
/C=US/O=CAISO/OU=IT/CN=CAISO_ISSUING_CA
/C=US/O=CAISO/OU=IT/CN=CAISO_Root_CA
...
SSL handshake has read 5009 bytes and written 138 bytes
...
SSL-Session:
  Protocol  : TLSv1.2
  Cipher    : ECDHE-RSA-AES256-GCM-SHA384
  Session-ID:
  Session-ID-ctx:
  Master-Key:
CAME9EC6BBE0C91959137ABBDADFDA236CBDF7BD1FD3F885CD1DE4836C8D2BA5ECCA9F58FB3FB8490DBA5BEA7AFC8E37F
  Key-Arg   : None
  PSK identity: None
  PSK identity hint: None
  SRP username: None
  Start Time: 1519937798
  Timeout   : 7200 (sec)
  Verify return code: 19 (self signed certificate in certificate chain)
```

With the OpenSSL utility, it is possible to force a TLS 1.2 connection

The example on the left highlights how to connect to MAP-Stage using TLS 1.2

OMS Status Messages

The ISO is evaluating a change in OMS status messages

Currently participants retrieve OMS status messages directly without a way to know if the outage status has changed; this is inefficient and unnecessarily consumes network resources

Based on participant feedback, the ISO is evaluating a change to push OMS status messages when there is a change in outage status

Message patterns under consideration include Claim Check

UAAs (User Account Administrators) could maintain message endpoints in AIM

This same message pattern could be applied to other use cases, such as market events (for example, “Market Closed”)

RAAM Decommissioning

The ISO will be decommissioning the RAAM application, also known as SCP

RAAM SCP	Resource Adequacy Availability Management Standard Capacity Product
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RAAM UI	https://portal.caiso.com/scp
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RAAM APIs	https://portal.caiso.com/scp/services/ *
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Timing to be announced

Look for an update in an upcoming Customer Partnership Group meeting on 3/19

Next TUG: March 20

Stay connected



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