APA Web Services Access Request
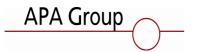
For Gas Transmission Customers

Version: **v0.6**

Date: **21ˢᵗ April 2015**

1 Document Control

1.1 Review & Distribution List

Version	Review Date	Reviewed by	Title	Action

1.2 Revision History

Version	Review Date	Author	Reviewed by	Summary of change	Status
0.1	20/12/2011	Steve Nield		Initial	
0.2	21/12/2011	Steve Nield	Emmanuel Bresson	Updated after POC	
0.3	22/12/2011	Steve Nield	Darryl Argus	Updated after review	
0.4	3/1/2012	Steve Nield	Christian Wickham	Updated after review	
0.5	10/08/2012	Steve Nield		FTPS IP Addresses added	Published
0.6	21/04/2015	Peter Ford		FTPS IP Address and link for Sandbox updated	Published

1.3 Related Documents

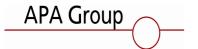| Document	Source Organisation

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2 Definitions

Term	Definition
APA	Meaning APA and it's relevant legal entities.
Customer	A customer with whom APA have contracts for haulage and also in some cases for storage of gas within APA owned or operated facilities. Also referred to as a Shipper.
Shipper	Please see Customer.

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3 Introduction

Web Service access to the APA systems for Gas Transmission Customers is granted to authorised registered participants.

3.1 Target Audience

This document has been written for the technical support personnel working at Gas Transmission Customers sites.

The document defines the configuration of Web Service at APA and the process for Participants to access them.

With the information contained in this document Participants should be able to develop applications that interface directly to the APA Automated Nomination System.

Participants should be aware that any applications developed by Participants or third party organisations that make use of the APA Automated Nomination System will not be supported by APA

3.2 Assumptions

It is assumed that the technical support personnel making use of the APA Web Services will have a working knowledge of Web Services in general, network systems and the APA Automated Nomination System.

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4 Details

4.1 APA Web Services Build Pack For Gas Transmission Customers

These instructions should be read in conjunction with the "APA Web Services Build Pack For Gas Transmission Customers".

4.2 Web Services

4.2.1 Web Services URLs

The APA Production Web Service URL is: ws.apa.com.au

The APA Sandbox Web Service URL wstrain.apa.com.au

4.2.2 Web Service Authentication - Client Certificates

Web service authentication will be based on X.509 client certificates generated for each Web Service Application User-id.

The Client Certificate for an Web Service Application user will be stored in the associated *ClientCertificate* folder on their FTPS site (See FTPS below).

The client certificate PFX file (which contains all required certificates) has a password which will be emailed to the Participant AANS Coordinator.

4.2.3 Web Service Encryption

APA Group will publish a public SSL certificate verified by a valid Root Domain certificate authority to support the secure connections with external parties.

The valid Root Domain Certificate authority used for the SSL certificate for ws.apa.com.au is Thawte

128 Bit SSL Encryption will be required as a minimum.

4.2.4 Web Services Firewall

All connections from external parties must originate from a known external IP address registered to that external party. Discrete firewall objects will be established by APA and maintained for each external party within the APA firewall/s which identify the external party and limit the access from these known addresses only.

Direct access to internal APA systems will not be permitted. APA will provide a secure file transfer architecture via an appropriate gateway and will host the web services in a secure DMZ network only.

Web services will utilise TCP Port 40001

External parties firewall's must be configured to allow outgoing connections to this port.

Service	Source Address	Destination Address	Protocol	Port/s
Web Service	External Party Firewall IP Address	APA web service URL	TCP	40001

4.3 FTPS

4.3.1 FTPS Site

Each web services participant will also have access to an APA FTPS site, accessed by logging on with the Web Service Application user-id and password supplied by APA to the participant.

Note: This is FTPS, not to be confused with SFTP. SFTP is not supported.

The purpose of the FTPS site is to provide Web Services participants with access to:

1. Archived web service requests and responses.
2. Requested new Client Certificates

Inbound and outbound messages will be archived in an archive folder structure and will stay there unchanged.

From time to time, a participant may request a new client certificate from APA. New client certificates will generated by APA and put into the participant's *ClientCertificate* folder.

Each participant will have read-only access to their *archive* folder and full access to their *ClientCertificate* folder.

It is the responsibility of the participant to remove any Client Certificate that they have picked up from the *ClientCertificate* folder.

4.3.2 FTP URLs

The APA Production FTPS Site name is: www.apagrid.com.au (202.58.226.90)

The APA Sandbox FTPS Site name is uat.apagrid.com.au (202.58.226.80)

4.3.3 FTPS Protocols

File Transfer must be conducted using FTPS, that is File Transfer Protocol (FTP) that adds support for the Transport Layer Security (TLS) and the Secure Sockets Layer (SSL) cryptographic protocols. This is commonly known as FTPS.

Explicit Mode FTPS will be required, utilising Passive Mode file transfer.

Explicit FTPS allows the client and server to negotiate security settings. APA Group will require all authentication and data transfer to occur utilising the TLS/SSL encryption mechanism.
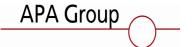
4.3.4 FTPS Firewall

APA will provide a secure file transfer architecture via an appropriate gateway and will host the FTPS service in a secure DMZ network only.

Explicit FTP will utilise TCP Port 21 for initial connection and establishment of the secure transport layer for authentication.

Data transfer, such as directory listing, file upload download will be conducted via passive mode.

Passive mode FTP will be established in the port range TCP 5000-5100 inclusive. External parties firewall's must be configured to allow outgoing connections to these ports.

Service	Source Address	Destination Address	Protocol	Port/s
Explicit FTPS	External Party Firewall IP Address	APA FTPS Server IP Address	TCP	21, 5000-5100

4.3.5 FTPS Authentication

FTPS authentication will be based on APA Group security.

Password expiry, complexity and lockout settings will be consistent with APA domain policy. External parties will be responsible for password management and security.

APA Group provides a "Password Change" facility at https://util.apagrid.com.au/ which can be used at any time to change the user's password, providing the current password is valid.

4.3.6 FTPS Encryption

Explicit FTPS will be required utilising TLS (Transport Layer Security) and Secure Sockets Layer (SSL) cryptographic protocols to provide the file transfer mechanism.

APA Group will publish a public SSL certificate verified by a valid Root Domain certificate authority to support the FTPS connections with external parties.

The valid Root Domain Certificate authority used for the SSL certificate for www.apagrid.com.au is Thawte

128 Bit SSL Encryption will be required as a minimum.

4.3.7 FTPS User Isolation

The file transfer mechanism will provide for complete isolation of external party information, based on the authentication credentials. It will not be possible for external parties to navigate to and/or modify the path is such a way that other parties directories or data can be visible.

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5 Web Service Participant - Access Request Form

	Participant Details	
	Participant Name:	
	Participant AANS Coordinator Name:	
	Job Title	
	Work Phone Number	
	Mobile Number	
	Email Address	
	Participant Business Hours Technical Contact Name	
	Job Title	
	Work Phone Number	
	Mobile Number	
	Email Address	
	Participant 24x7 Technical Contact Name	
	Job Title	
	Work Phone Number	
	Mobile Number	
	Email Address	
	Participant Email address for APA to distribute AANS Notices to: (this must be a distribution list, not an individual's email address) (notices can include advice of APA AANS system outages)	
	Participant Source IP Address (This will be used by APA Firewall rules to limit access to the APA Web Service and FTPS systems It needs to the external IP Address APA's firewall will see when the web service and FTPS connections are attempted from your firewall. Please supply your normal production IP Address and a standby or DR address if available)	
	All Companies that the Participant wishes this specific Application user-id to be able to make nominations for. (Please list all) (APAGrid support staff will contact the Participant AANS Cordinator to clarify any issues and confirm this list)	
		Company Name
	1	
	2	
	3	
	Participant AANS Coordinator Signature	
	Date	