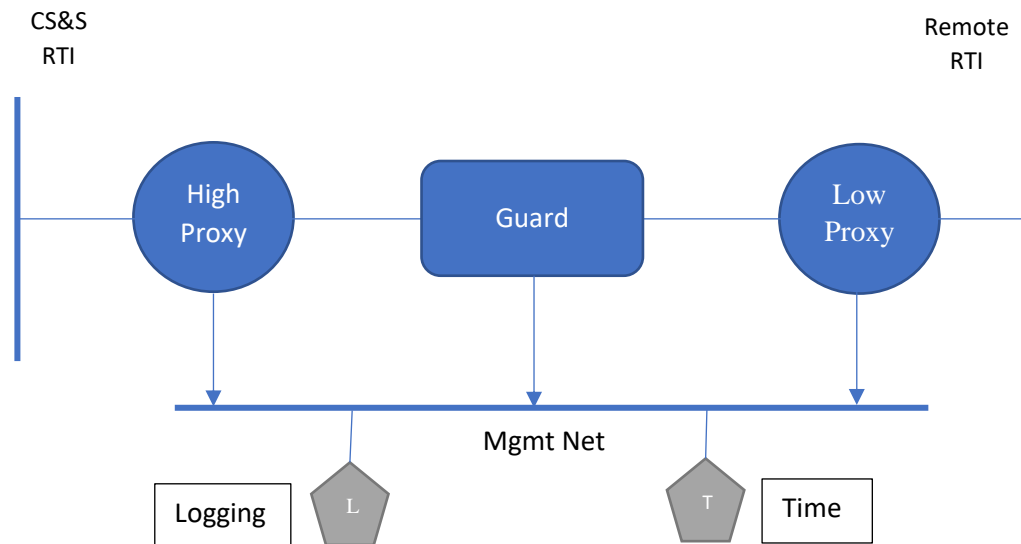# Patterns for Pitch Extender-based Gateways

MTG/HTG System
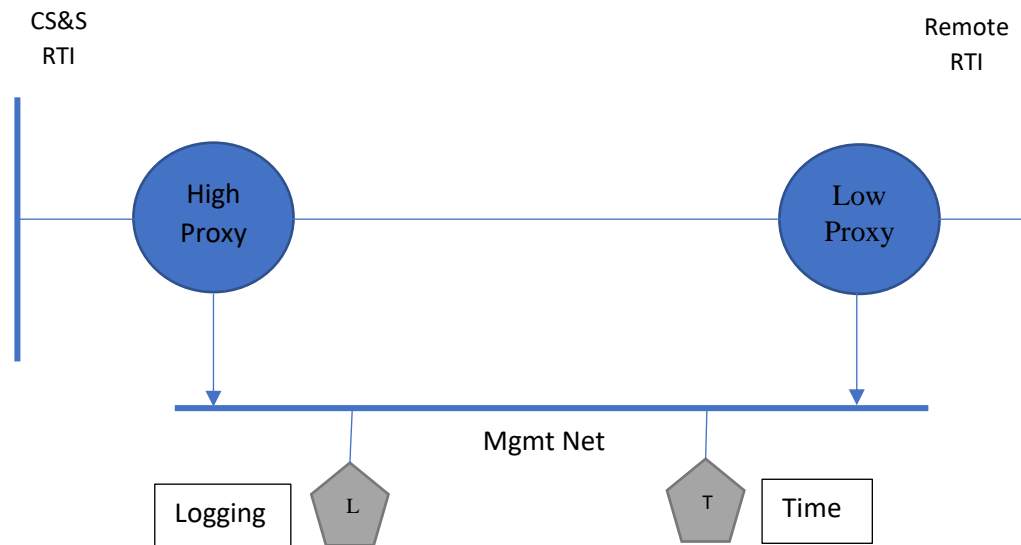
General arrangement:

Components and modules

Note that the *componentName* setting for the two proxies should include either 'High' or 'Low' so that the PitchBuilder tool can identify the appropriate component. (See below).

- High Proxy
  - Interface module (x3)*
  - Host module*
  - Federation module
  - OSP module (x2)
  - Export module
  - Extensions module
- Guard
  - Interface module (x3)*
  - Host module*
  - OSP module (x4)
  - Import module
  - Export module
- Low Proxy
  - Interface module (x3)*
  - Host module*
  - Federation module
  - OSP module (x2)
  - Import module
  - Extensions module

* Whilst these modules are required, only part of the information is used.

LTG System

General arrangement:

Components and modules

Note that the *componentName* setting for the two proxies should include either 'High' or 'Low' so that the PitchBuilder tool can identify the appropriate component. (See below).

- High Proxy
    - Interface module (x3)*
    - Host module*
    - Federation module
    - OSP module (x2)
    - Export module
    - Extensions module
- Low Proxy
    - Interface module (x3)*
    - Host module*
    - Federation module
    - OSP module (x2)
    - Import module
    - Extensions module

* Whilst these modules are required, only part of the information is used.

Module Specification

Interface module - proxy

The interface module is not currently used to assign IP addresses, but it does contain a logical interface name that is used during policy configuration to determine the logic of the flows (export/import).

Parameter Name	Value	Multiple	Notes
interfaceName	<interfaceName>	N	Could be 'real' or logical name; use logical name for

			documentation purposes (eg CSS Federation)

Host module

The host module is primarily used to determine the hostname (used in configuration) and the location of a syslog server. (See below for logging information).

Parameter Name	Value	Multiple	Notes
hostName	<hostName>	N	Not used – documentation only
logServer	<ipAddress>	N	
logPort	<port>	N	514 is syslog default
logTransport	UDP	N	TCP/TLS not supported
logProtocol	syslog		

Federation module

The federation module is used extensively in the Extender configuration file.

Parameter Name	Value	Multiple	Notes
federationName	<name>	N	CSS for the high proxy; user-defined for the low proxy
federateName	<name>	N	As defined in the FPDL Design file for the high proxy; user defined for the low proxy
interfaceName	<interfaceName>	N	Must match a name in an Interface module
crcAddress	<ipAddress>	N	Hostname not supported
addressType	ipAddress	N	Must be set to ipAddress
crcPortNumber	<portNumber>	N	
hlaSpec	HLA Evolved	N	Spelling & format mandatory
fomFile	<filename>	Y	See notes on directory structure

OSP module

This is used within the Extender configuration file

Parameter Name	Value	Multiple	Notes
path	exportPath or importPath	N	
protocol	HPSD_TCP	N	
inputPort	<ipAddress>:<port>	N	See notes on OSP
outputPort	<ipAddress>:<port>	N	See notes on OSP

Import module

This is used to create the filter configuration for the Low proxy. Only the Interface Name can be set (purely for documentation purposes); the policy is defined in the FPDL Design file and cannot be changed.

Parameter Name	Value	Multiple	Notes
interfaceName	<interfaceName>	N	Must match a name in an Interface module

Export module

This is used to create the filter configuration for the High proxy. Only the Interface Name can be set (purely for documentation purposes); the policy is defined in the FPDL Design file and cannot be changed.

Parameter Name	Value	Multiple	Notes
interfaceName	<interfaceName>	N	Must match a name in an Interface module

Extensions module

Pitch proxies require some additional configuration information.

Parameter Name	Value	Multiple	Notes
vendorName	Pitch Technologies	N	Mandatory spelling and format
instanceIdAttribute:<objectClassName>	<encoding>	Y	objectClassName fully qualified; Encoding values: UNICODE_STRING ASCII_STRING RPR_MARKING RPR_ENTITY_ID UUID (See HPSD 0.81 spec)
configurationType	<configType>	N	configType values: LocalSettingsDesignator PitchSpecific ManualConfiguration (see Extender Config)
Create	<filename of FDD>	N	(see Extender config>

OSP notes
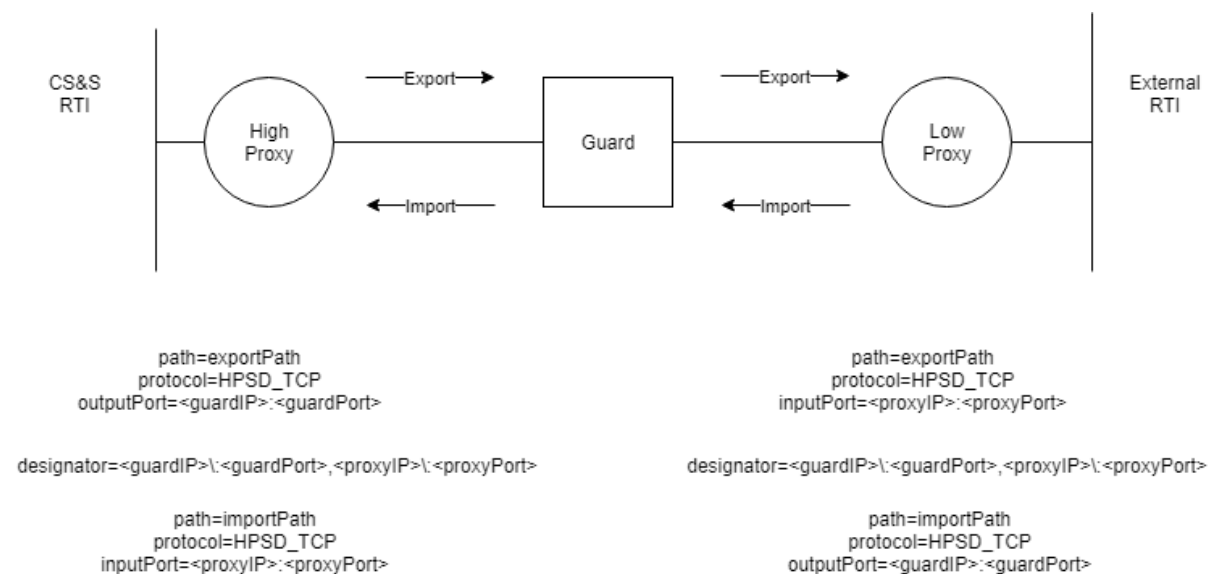
The above diagram explains the relationship between the import and export paths and the corresponding OSP module settings (and how these are translated into the designator value for HPSD (B side) configuration.

Directory structure