

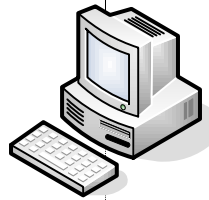
### (A)utomated (P)rovisioning (S)ystem

The APS allows VOP to update its bootstrap, firmware and configuration files through the network when updates are available.

The update verification process is done every 6 hours and every time the application is started.

The full update process described here is only done when the application is (re)started.

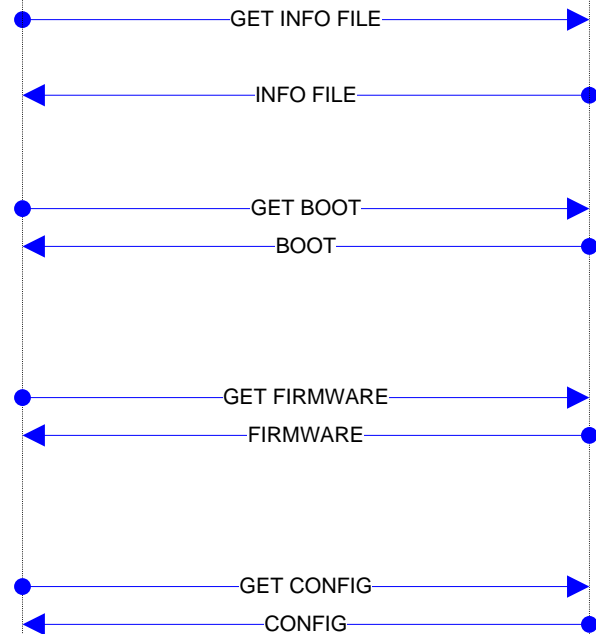
Voice Operator Panel  
(VOP)



Provisioning Server  
(PS)



VOP checks if a local information file exists
If it doesn't exist VOP asks for a username and password
VOP sends a request to the PS with its username and password
The PS creates an information file with the remote user files information
The PS replies with the information file
VOP checks if the version of the bootstrap is different from his
VOP uses the bootstrap update URL found in the information file
VOP sends the bootstrap update request to the PS
The PS replies with the bootstrap
VOP validates the bootstrap using the MD5 in the information file
VOP checks if the serial of the firmware is greater than his
VOP uses the firmware update URL found in the information file
VOP sends the firmware update request to the PS
The PS replies with the firmware
VOP validates the firmware using the MD5 in the information file
VOP checks if the serial of the configuration is greater than his
VOP uses the configuration update URL found in the information file
VOP sends the configuration update request to the PS
The PS replies with the configuration
VOP validates the configuration using the MD5 in the information file
VOP saves the information file and starts



The protocol used for the APS is HTTP or HTTPS.

The format of the information file is XML.

The structure of the information file is:

```

<info>      Information
<bootstrap> Bootstrap section
  <version>  Version number (if not present the bootstrap section is ignored)
  <url>      URL of the bootstrap update request (if not present the bootstrap section is ignored)
  <md5>      MD5 hash of the bootstrap (if not present the transferred bootstrap integrity is not checked)
<firmware>  Firmware section
  <serial>   Serial number (if not present the firmware section is ignored)
  <url>      URL of the firmware update request (if not present the firmware section is ignored)
  <md5>      MD5 hash of the firmware (if not present the transferred firmware integrity is not checked)
<config>    Config section
  <serial>   Serial number (if not present the config section is ignored)
  <url>      URL of the config update request (if not present the config section is ignored)
  <md5>      MD5 hash of the config (if not present the transferred config integrity is not checked)
    
```

The XML header and closing tags are omitted but must be present in the information file.

The URLs can contain special variables which are replaced by VOP before sending the request:

\$u is replaced by the username, \$p is replaced by the password, \$v is replaced by the bootstrap version number, \$t is replaced by the request type, where type is (i)nfo, (b)ootstrap, (f)irmware, (c)onfig.