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Secure Access Link (SAL)
Installation and Onboarding Guide

Audience	Purpose
• Customers • Partners • Avaya	• This document is a guide on processes and procedures to implement a SAL gateway and add managed devices • Each knowledge area will include additional resources available to assist in step completion

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Note: SAL Installation and On-Boarding activities are a sub-set of the overall registration process. See **Section IX. Diagrams** for further information. Additionally, overall registration policies and documents can be found at *support.avaya.com → Help & Policies → Policies & Legal → Avaya Equipment Registration*.

I. Pre-requisites

Utilize this section to ensure you are prepared to deploy a SAL gateway.

1. An Avaya Single Sign On (SSO) login. This can be obtained by going to support.avaya.com and clicking the Register button.
2. A Sold-To (also called Functional Location or FL). The Sold-To is your Avaya account number for the location at which you are implementing the SAL gateway. Your SAL gateway will be registered to your Sold-To. If you do not know your Sold-To, please contact your Partner or Avaya Account Manager.
3. Register for http://livesupportbeta.avaya.com/ for SAL forums and virtual collaboration environment to discuss questions and receive support. (Beta site will transition to a Generally Available site in the near future.)
4. If you have an **Avaya Aura System Platform** solution, an embedded SAL gateway is built into your product as a virtual machine. This embedded SAL gateway is scoped to only support the Avaya applications it is co-resident with. If you are using the embedded SAL, you may skip directly to **Section IV. SAL Technical Onboarding Step 1**.
5. Products on System Platform 6.0.3 (System Platform 6, Service Pack 3 or higher) can either be added to the embedded SAL gateway or a standalone SAL gateway.
6. If you are looking to centralize remote access and alarming or provide service to a product that is not on Avaya Aura System Platform, you will use a **standalone SAL Gateway**.

Avaya Proprietary and Confidential Information – use pursuant to your Agreement with Avaya

- The standalone SAL gateway software is provided free as part of your Service Agreement with Avaya.
- It requires a server (hard or virtual) and Red Hat Enterprise Linux
- SAL 2.1 currently requires:
  - Single core 1 GHz, 40GB disk space, 2 GB RAM
  - Red Hat 5.X 32 bit
  - HTTPS 443 outbound TCP access to specified Avaya addresses provided in **Section V. Install**
- SAL 2.2 currently requires:
  - Single core 1 GHz, 40GB disk space, 2 GB RAM
  - Red Hat 5.X 32 or 64 bit or Red Hat 6.X 32 or 64 bit
  - HTTPS 443 outbound TCP access to specified Avaya addresses provided in **Section V. Install**

7. Review the **Secure Access Link Supported Products List** document for network and product specific considerations at *support.avaya.com → Downloads and Documents → Secure Access Link → Documents*
8. View the **How to Get your Secure Access Link Gateway Online with Avaya** (5 minutes) on AvayaMentor at http://www.youtube.com/watch?v=6A5Osa2V8sA&feature=plcp

Pre-Requisite Resources

- The **Implementation Guide** includes technical detail and requirements. It is on support.avaya.com as "Secure Access Link 2.X Gateway Implementation Guide": *support.avaya.com → Downloads and Documents → Secure Access Link → Manuals*
- The Customer and Partner **Presentations** and Security **White Paper** are located on the Sales and Partner Portals, under Services A-Z → Secure Access Link. (Directly accessible by Avaya employees and Partners only; clients, please contact your Account Manager.)
- Installation **training** is available as a recorded session through Avaya Learning http://www.avaya-learning.com/. Please search for "Secure Access Link" to find the latest sessions.
- Account information at 866-GO-AVAYA
- View other videos at the AvayaMentor Channel, by searching the Channel for Secure Access Link at youtube.com/AvayaMentor

II. Ordering

In certain circumstances, you may need to enter a zero dollar order to enable the SAL download. Additionally, you may order optional hardware and Professional Services.

1. If you are using the embedded SAL gateway that is part of your Avaya Aura System Platform, you can skip to **Section IV. SAL Technical Onboarding Step 1**.
2. If you are using a standalone SAL gateway, you should already have access to the download from Avaya (see **Section III. Download**). If you do not see SAL as an available download for your account, please have your Avaya Account Manager or Partner enter a zero dollar order for SAL Software download, material code 227272.
3. Avaya can optionally provide hardware and the operating system. This would be added to an order by your Avaya Account Manager or Partner.
4. Avaya can optionally provide Professional Services to setup and configure the solution. This would be added to an order by your Avaya Account Manager or Partner.

Ordering Resources

- Avaya and Partners can enter orders through ASD. Contact ATAC for design assistance at 888-297-4700 or by email at atac@avaya.com, subject starts "SAL"

III. Download

If you are deploying a standalone SAL gateway, you will need to download the application zip file and supporting documents.

1. If you are using the embedded SAL gateway that is part of your Avaya Aura System Platform, you can skip to **Section IV. SAL Technical Onboarding Step 1**.
2. Secure Access Link is downloaded from Avaya's Product License and Delivery System (PLDS) at https://plds.avaya.com.
3. Go to https://plds.avaya.com
4. Click Assets → View Downloads
5. In the Company Name field, click the Search icon and find your company's account. (You can apply search criteria or just hit Search Companies for all results associated with your username.)
6. In the Application drop box, choose Secure Access Link
7. Click Search Downloads

   If you receive a message saying there are no results for your account, contact your Avaya or Partner Account Manager or follow the instructions displayed on the screen. You should return to **Section II. Ordering**.
8. You will receive a list of download packages
   - Choose the latest version of the SAL gateway, currently "Secure Access Link 2.1 Gateway GA Download ID ID:SAL00000016"
   - Also download the latest Service Pack, currently "Secure Access Link 2.1 Gateway Service Pack 2 Download ID:SAL00000028"
   - Secure Access Link 2.2 Gateway GA will be available September 30, 2012

Download Resources

- PLDS https://plds.avaya.com Help documentation, found at the Help link within PLDS
- Section II. Ordering of this document

IV. SAL Registration Records Creation - *also referred to as On-boarding Step 1*

Prior to installing a SAL gateway, Avaya will need to register the SAL and the items it will manage in Avaya's servicing systems. This ensures the proper tools and processes are in place and ready for the first communication from the SAL gateway. In addition, the Avaya registration team will provide unique IDs needed as part of the SAL installation.

SAL 2.2 users will have a different experience than described in the following steps. SAL 2.2 has an auto-registration feature, allowing the SAL to retrieve its own SEID and Product ID from Avaya through the installer. You will need to know your Sold To (FL) and your Avaya SSO login. If you only need an SEID and Product ID for the SAL Gateway, you do not need to submit a registration form. If you have other devices to register behind the SAL, please submit the form for those devices.

1. SAL gateways and the devices they manage must be registered with Avaya in order for the communication to function properly. Registration information is entered into the SAL gateway during implementation; therefore prior to implementation, registration documentation must be submitted.
2. The registration form is entitled "Secure Access Link Registration Form," found at: *support.avaya.com → Downloads and Documents → Secure Access Link → Manuals*
3. Under the Non-Regional heading, click the "Universal Install/SAL Product Registration Request Form" link to download the Excel registration form
4. After opening the form, ensure you enable Macros. Click on the red button "Excel 2007 Security Issue" for more detail.
5. Steps to register are as follows:
   I. Click Start Registration
   II. From the Selection Menu, choose the best option
      - New Standalone SAL Registration for any equipment not on Avaya Aura System Platform that requires a new SAL gateway

- New System Platform/Universal Install (UI) Registration/Migration for Avaya Aura System Platform products
- Existing SAL (including UI embed SAL) for migrations of existing product to an existing SAL gateway

III. Utilize the form to fill out account and contact information. If the form is not clear, you may be contacted by the registration team for clarification.
IV. Choose the products you are registering and answer product specific questions as presented
V. If you do not see your product, choose the "Other – Other" from either the "New Standalone SAL" or "Existing SAL" sections
VI. Provide any clarifying comments on the form in the free text areas
VII. If products are communicating with more than one SAL gateway, include the SEIDs for both SAL gateways in the "SAL GW Solution Element ID" field or use the "Add comments" check box on the System Platform pages.
VIII. If you are deploying a Avaya Aura System Platform solution and are not using the embedded SAL gateway, please use the "Add comments" check box on the System Platform page and denote if you want a new standalone SAL gateway or include the SEID of an existing SAL gateway.
IX. Once complete, click the "Email" button (gray picture of an envelope and arrow in a red box) to submit your form.
X. You will receive a five digit case ID back from no-reply@avaya.com and see the sent message in your email outbox

SAL Technical Onboarding Step 1 Resources

- Email: regescal@avaya.com for status and escalations; please include five digit case ID
- Visit http://livesupportbeta.avaya.com/ for SAL forums and virtual collaboration environment to discuss questions and receive support. (Beta site will transition to a Generally Available site in the near future.)
- Call during US business hours (Monday - Friday 6am to 5pm MST) for status and assistance:
  - Clients: 800-242-2121 extension 15409
  - Partners: 800-225-0266 following final registration prompts
  - Avaya: 800-248-1234 following final registration prompts

V. Install - *also referred to as On-boarding Step 2a*

The standalone SAL gateway application will need to be installed.

1. For standalone SAL gateways, the **Secure Access Link Implementation Guide** includes step-by-step installation instructions. It is available in the downloaded ZIP file and also on support.avaya.com as "Secure Access Link 2.X Gateway Implementation Guide": *support.avaya.com → Downloads and Documents → Secure Access Link → Manuals*
   - Java environmental variable needs to be set for both root and saluser prior to install. Please consult the Secure Access Link Implementation Guide for full details.
2. For embedded Avaya Aura System Platform SAL gateways, refer to the included System Platform Implementation Guide and the SAL specific section.
3. Open port 443 outbound from the SAL gateway to the Avaya or Partner support addresses. Avaya addresses can be found on the "Secure Access Link Supported Products" list at: *support.avaya.com → Downloads and Documents → Secure Access Link → Manuals*
4. Ensure communication is open from the SAL gateway to Avaya
   - SAL to Remote Server
     1. From the User Interface, go to the Administration section
     2. Choose the Remote Server page
     3. In the Primary Destination field, enter sl1.sal.avaya.com (that is lower case S L and the number 1) *
     4. In the Port field, enter 443
     5. Press the Test button to validate connectivity

6. Alternatively, from the Command Line Interface, enter the command "wget --no-check-certificate https://sl1.sal.avaya.com:443

- SAL to Core (Alarming) Server
  1. From the User Interface, go to the Administration section
  2. Choose the Core Server page
  3. In the Primary Destination field, enter secure.alarming.avaya.com
  4. In the Port field, enter 443
  5. Press the Test button to validate connectivity
  6. Alternatively, from the Command Line Interface, enter the command "wget --no-check-certificate https://secure.alarming.avaya.com:443/DataTransport_Servlet/servlet/TransportReceiverServlet

  **Use Partner supplied address for other service providers*

Install Resources

- Visit support.avaya.com for the latest SAL documentation at *support.avaya.com → Downloads and Documents → Secure Access Link*
- For self-help resources, go to support.avaya.com and utilize the "Search Support Site" functionality to find knowledge base articles.
- Visit http://livesupportbeta.avaya.com/ for SAL forums and virtual collaboration environment to discuss questions and receive support. (Beta site will transition to a Generally Available site in the near future.)
- Implementation Partners open a case on support.avaya.com or call 800-289-0602
- Avaya technicians call 800-248-1234
- Clients may also contact your Avaya or Partner Account Manager for Professional Services engagement

VI. Add Managed Elements *- also referred to as On-boarding Step 2b*

The devices for which the SAL will handle remote connectivity and alarming will need to be added to the SAL gateways user interface.

1. Ensure pre-requisite steps are completed
   i. You have received the form back you submitted in **Section III. SAL Technical Onboarding Step 1**, which has the SEIDs (Solution Element IDs) and Product IDs. See the resources section in **Section III. SAL Technical Onboarding Step 1** if you do not yet have the completed form.
   ii. You have successfully installed the SAL Gateway and are able to access the graphical user interface
2. You have your internal IP Addresses and Hostnames of each device for which the SAL will be managing access and alarming
3. Click on the Managed Elements link under the Secure Access Link Gateway section of the UI navigation menu
4. For each device being added, click Add New and then fill out the following fields:
   i. Add the Host Name
   ii. Add the IP Address
   iii. Choose the Model type (see the "Secure Access Link Supported Products" list at: *support.avaya.com → Downloads and Documents → Secure Access Link → Manuals*)
   iv. Add the SEID, which is provided by Avaya from the Registration process and is in (XXX)XXX-XXXX format
   v. Add the Product ID if provided by Avaya from the Registration process. The Product ID is used for alarming products.
   vi. For the Expected Serviceable Support Status field, choose "ONBOARDED" to allow SAL to run on-boarding scripts with the end product and ensure connection exists between the SAL and the supported element.

vii. For guidance on other fields, see the **Secure Access Link Implementation Guide**, the "Managed element configuration" section.

5. Once the Managed Elements are added, restart the SAL Gateway services. At the top of the SAL user interface, there is a link displayed that will initiate the services restart.

Add Managed Elements Resources

- Visit support.avaya.com for the latest SAL documentation at *support.avaya.com → Downloads and Documents → Secure Access Link → Manuals*
- Visit http://livesupportbeta.avaya.com/ for SAL forums and virtual collaboration environment to discuss questions and receive support. (Beta site will transition to a Generally Available site in the near future.)
- For self-help resources, go to support.avaya.com and utilize the "Search Support Site" functionality to find knowledge base articles.
- Implementation Partners open a case on support.avaya.com or call 800-289-0602
- Avaya technicians call 800-248-1234
- Clients may also contact your Avaya or Partner Account Manager for Professional Services engagement

VII. SAL Technical Onboarding *- referred to as On-boarding Step 3*

Avaya will test connections and configure alarming (if entitled) once the SAL gateway is installed and the Managed Elements are added. Once you have completed the previous two steps, you are ready to submit for final sign-off from Avaya and enter standard service.

1. Using the registration form you received back from the Avaya Registration team, click on the email button (mail picture in red square) from the "Alarm Registration Page" (this is the page that the form was sent to you on that includes the SEIDs and Product IDs)
2. You will receive a new five digit case number back from no-reply@avaya.com
3. As the case is worked, you will see note updates, through to a completion notice showing connectivity and alarming have been tested and your product is ready for support from Avaya
4. If the registration engineers encounter issues they are unable to resolve remotely, they may contact you for support
5. Once completed, your product is now successfully supported through SAL.

SAL Registration Step 2 (Final) Resources

- Email: regescal@avaya.com for status and escalations; please include five digit case ID
- Visit http://livesupportbeta.avaya.com/ for SAL forums and virtual collaboration environment to discuss questions and receive support. (Beta site will transition to a Generally Available site in the near future.)
- Call during US business hours (Monday - Friday 6am to 5pm MST) for status and assistance:
  - Clients: 800-242-2121 extension 15409
  - Partners: 800-225-0266 following final registration prompts
  - Avaya: 800-248-1234 following final registration prompts

VIII. Support

Your products are supported by Avaya and/or your Service Partner through SAL. This section will assist you in gaining production support as needed.

1. For self-help resources, go to support.avaya.com and utilize the "Search Support Site" functionality to find knowledge base articles.
2. For break/fix maintenance support issues, please open a Service Request on support.avaya.com, selecting the SAL gateway as the product. This will route the Service Request to a Backbone Engineer who specializes in supporting SAL.

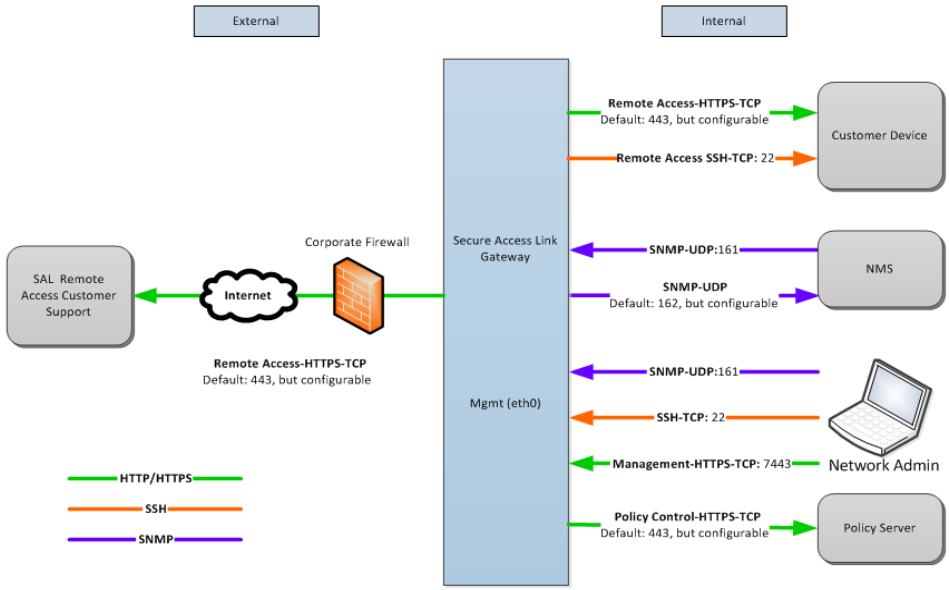
3. Utilize the LiveSupport beta site for live discussions and questions.

Support Resources

- Visit support.avaya.com
- Visit http://livesupportbeta.avaya.com/ for SAL forums and virtual collaboration environment to discuss questions and receive support. (Beta site will transition to a Generally Available site in the near future.)

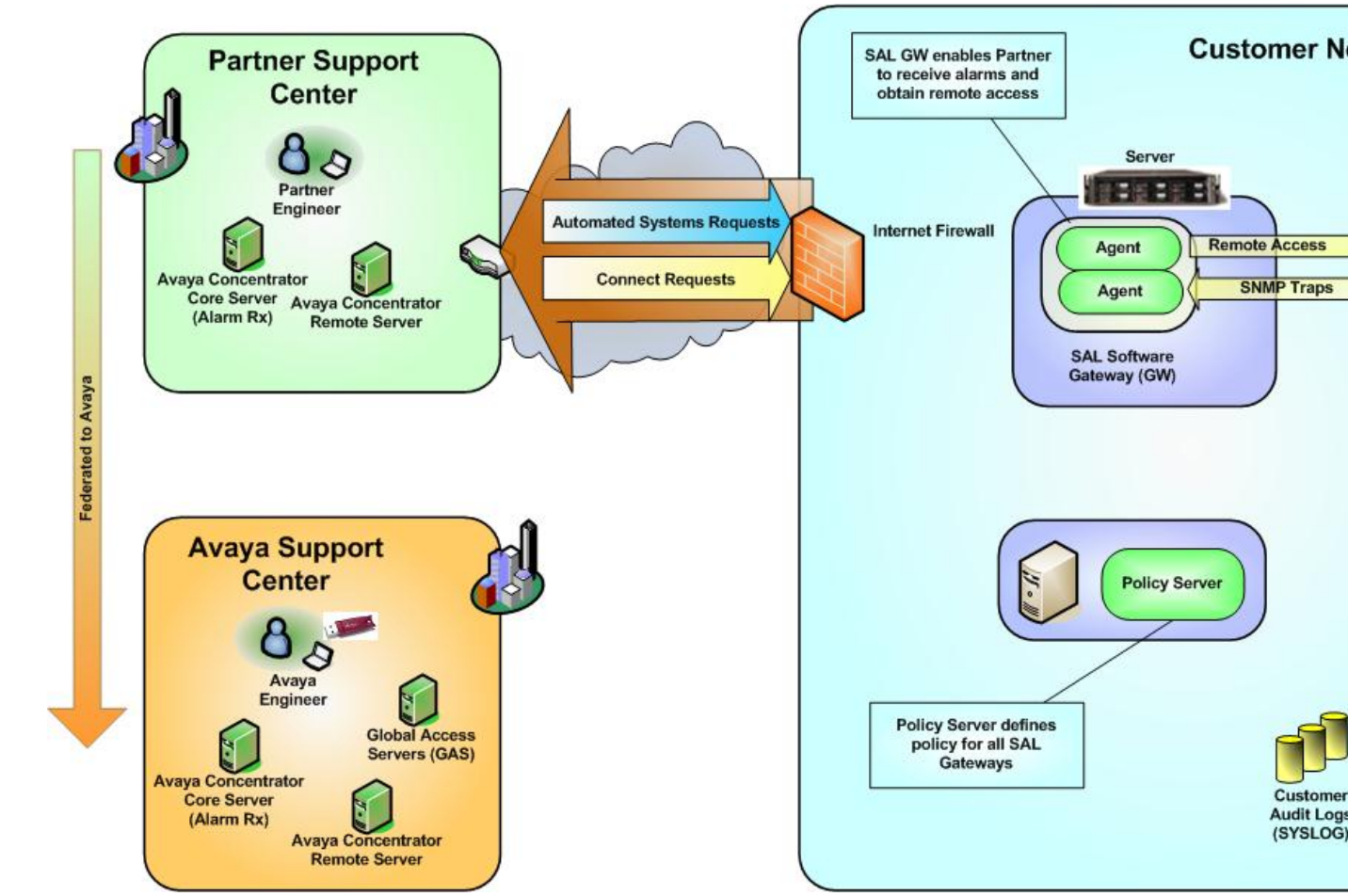
IX. Diagrams

Network port consideration sample



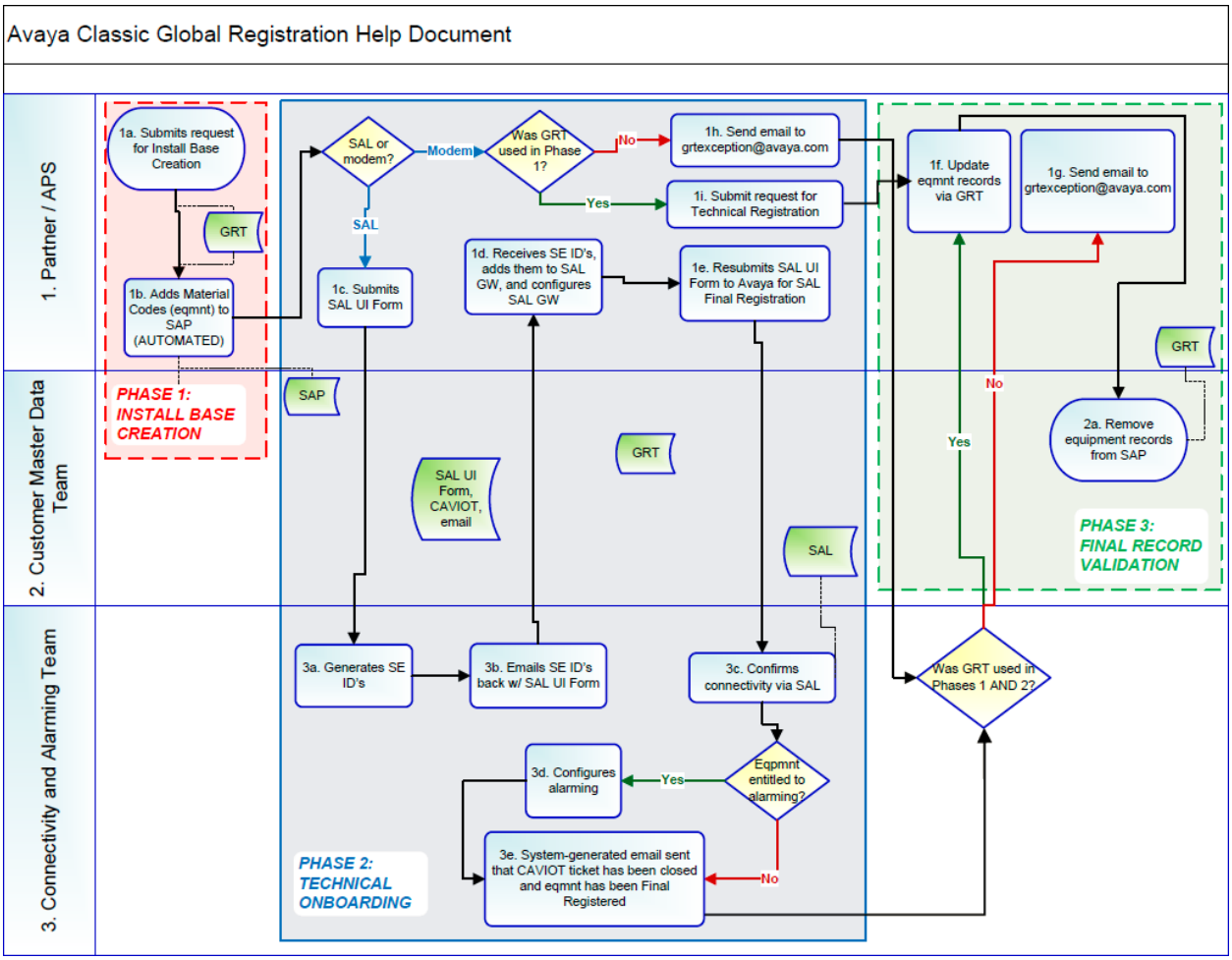
Standalone SAL deployment sample

From the SAL gateway to Avaya or a Service Partner, communication is handled securely with an outbound firewall rule for port 443 to specific trusted destinations.



HTTPS outbound is the only opening from the SAL Gateway out of the customer network, for both alarming and remote access

On-boarding process diagram

This document covers a subset of the overall registration process. Within the diagram below, process steps in red are out-of-scope from this document and may not apply in certain SAL migration scenarios.

Overall registration policies and documents can be found at *support.avaya.com → Help & Policies → Policies & Legal → Avaya Equipment Registration*.