

Enable HTTPS for On-premises PACS

HTTPS communication can be enabled for on-premises PACS.

Communication will be encrypted and it allows you to operate on-premises PACS for more secure.

1. Create a server certificate

Create a self-signed certificate using Powershell.

- 1. Start PowerShell as administrator
- 2. Execute the following command. In "DESKTOP-XXX", enter the computer name.

```
New-SelfSignedCertificate -DnsName DESKTOP-XXX -CertStoreLocation
"cert:\LocalMachine\My" -NotAfter (Get-Date).AddYears(50)
```

2. Export the certificate

1. In Run command window, enter "mmc" and click OK.





| File | Action | View | Favorites | Window | Help | _ 8 : |
|------|-------------|--------|-----------|---------|--|-------|
| | New | | | Ctrl+N | | |
| | Open | | | Ctrl+O | ne Actions | |
| | Save | | | Ctrl+S | There are no items to show in this view. | - |
| | Save As | | | | More Actions | • |
| | Add/Remov | ve Sna | p-in | Ctrl+N. | | |
| | Options | | | | | |
| | Recent File | | | | | |
| | Exit | | | | | |
| | | | | | | |

2. Open "Add/Remove Snap-ins" from "File" tab.

3. Select "Certificates" from "Available snap-ins" and click "Add" button.

| ap-in | Vendor | ^ | Console Root | Edit Extensions |
|-----------------------|----------------|---|--------------|-----------------|
| ActiveX Control | Microsoft Corp | | | |
| Authorization Manager | Microsoft Corp | | | Remove |
| Certificates | Microsoft Corp | | | |
| component Services | Microsoft Corp | | | Move Up |
| Computer Managem | Microsoft Corp | | | note op |
| Device Manager | Microsoft Corp | | | Move Down |
| Disk Management | Microsoft and | | | |
| Event Viewer | Microsoft Corp | | | |
| Folder | Microsoft Corp | | | |
| Group Policy Object | Microsoft Corp | | | |
| Internet Information | Microsoft Corp | | | |
| , IP Security Monitor | Microsoft Corp | | | |
| IP Security Policy Ma | Microsoft Corp | | | |
| Link to Web Address | Microsoft Corp | | | Advanced |
| Local Users and Gro | Microcoft Corn | * | | , a fulleculti |



4. Select "Computer account" and click "Next".



5. Click "Finish".

| Select Computer | | | \times |
|---|--|-------------------|----------|
| Select the computer you want t | this snap-in to manage. | | |
| ⊤This snap−in will always mana | age: | | |
| Local computer: (the com | nputer this console is running on) | | |
| O Another computer: | | Browse | |
| Allow the selected compu- if you save the console. | uter to be changed when launching from the command line. | This only applies | |
| | | | |
| | | | |
| | | | |
| | | | |
| | | | |
| | | | |
| | < Back Finish | Cancel | |



6. Click "OK".

| ActiveX Control Authorization Manager | Microsoft Corp | | | | |
|--|----------------|---|---------------------------------------|-------------------------------|-----------|
| Authorization Manager | | | · · · · · · · · · · · · · · · · · · · | Certificates (Local Computer) | |
| | Microsoft Corp | | | | Remove |
| Certificates | Microsoft Corp | | | | |
| Component Services | Microsoft Corp | | | | Move Up |
| Computer Managem | Microsoft Corp | | | | |
| Device Manager | Microsoft Corp | | | | Move Down |
| Disk Management | Microsoft and | | Add > | | |
| Event Viewer | Microsoft Corp | | | | |
| Folder | Microsoft Corp | | | | |
| Group Policy Object | Microsoft Corp | | | | |
| Internet Information | Microsoft Corp | | | | |
| IP Security Monitor | Microsoft Corp | | | | |
| IP Security Policy Ma | Microsoft Corp | | | | |
| Link to Web Address | Microsoft Corp | ~ | | | Advanced |
| Local Lloore and Cro | Microcoft Corn | _ | | | |

7. In "Console Root", open Certificates > Personal > Certificates.

| Console1 - [Console Root\Certificates (Local Computer)\Personal] | - 🗆 X |
|--|------------|
| 🚟 File Action View Favorites Window Help | _ 8 × |
| ⇐ ➡ 🖄 🗊 📋 🗟 🔂 🛐 | , |
| Console Root Object Type | Actions |
| V Providence (Local Computer) | Personal 🗸 |
| Personal | |
| Certificates | |
| > Cartification Au | |
| > Enterprise Trust | |
| > 🚞 Intermediate Certification Au | |
| > Caracter Publishers | |
| > Contrasted Certificates | |
| > Third-Party Root Certification | |
| > 🚞 Trusted People | |
| Client Authentication Issuers | |
| > 🦳 Preview Build Roots | |
| > 📔 Test Roots | |
| > 🚞 AAD Token Issuer | |
| > 🧮 eSIM Certification Authoritie: | |
| > 🧮 F5FirePassRoot | |
| > 🧮 Homegroup Machine Certific | |
| > 🧮 Remote Desktop | |
| > 🧮 Certificate Enrollment Reque | |
| > 🧮 Smart Card Trusted Roots | |
| > 🧮 Trusted Packaged App Install | |
| > 🚞 Trusted Devices | |
| > 🧮 Web Hosting | |
| > 🚞 Windows Live ID Token Issue 🧅 | |
| | |
| Personal store contains 1 certificate. | |



8. You will see the certificate with the computer name. Double-click on it.



9. In "Details" tab, click "Copy to File".

| Certificate | | > |
|-----------------------------------|----------------------------------|---|
| General Details Certification Pat | h | |
| Show: <all></all> | ~ | |
| Field | Value | ^ |
| Version | V3 352c7b758edb708447fc4f0b89 | |
| Signature algorithm | sha256RSA | |
| Signature hash algorithm | sha256 | |
| Issuer | JIUN-NOTE-202008 | |
| Valid from | Tuesday, December 12, 2023 | |
| 🔄 Valid to | Tuesday, December 12, 2073 | |
| 📴 Subject | JIUN-NOTE-202008 | ~ |
| | | |
| | Edit Properties Copy to File | |
| | O | ĸ |



10. The Certificate Export Wizard will appear. Click "Next".



11. Click "Next".

| | | \times |
|---|---|----------|
| ~ | Certificate Export Wizard | |
| | | |
| | Export Private Key | |
| | fou can choose to export the private key with the certificate. | |
| | Private keys are password protected. If you want to export the private key with the certificate, you must type a password on a later page. | |
| | Do you want to export the private key with the certificate? | |
| | \bigcirc Yes, export the private key | |
| | No, do not export the private key | |
| | | |
| | | |
| | | |
| | | |
| | | |
| | | |
| | | |
| | Next Canc | el |



12. Click "Next".





13. Click "Browse", name the file to be exported, specify any location such as the desktop, and click "Save".

| ← See Certificate Export Wizard | | | |
|--|------------------------|----------------|---------------|
| File to Export Specify the name of the file you want to export | | | |
| File name: | | | |
| Next Cancel | | | |
| Save As ← → ✓ ↑ □ → This PC → Desktop | ٽ _ک | Search Desktop | × |
| Organize New folder | | , | EE ▼ ? |
| This PC Name | Date modified | Туре | Size |
| Image: SD Objects No Image: Desktop Image: SD Objects Image: Desktop Image: SD Objects Image: Documents Image: SD Objects Image: Documents | items match your searc | | > |
| File name test0123 | | | ~ |
| Save as type: DER Encoded Binary X.509 (*.cer) | | | ~ |
| Hide Folders | | Save | Cancel |



14. Click "Next".

| | ~ |
|---|---|
| 🐖 Certificate Export Wizard | |
| | |
| | |
| | |
| File to Export | |
| Specify the name of the file you want to export | |
| | |
| | |
| File name: | |
| Desktop¥test0123.cer Browse | |
| Lowe | |
| | |
| | |
| | |
| | |
| | |
| | |
| | |
| | |
| | |
| | |
| | |
| | |
| | |
| | |
| | |
| | |
| | |
| Next Cano | e |

15. Click "Finish" to complete the Certificate Export Wizard.



| Certificate Export Wizard | × |
|----------------------------|---|
| The export was successful. | |
| OK | |



3. Import the certificate into Trusted Root Certificate Authorities

- 1. Open the .cer file you saved in Step 15.
- 2. Click "Install Certificate".





Г

3. The Certificate Import Wizard will appear. Click "Next".

| <i>§</i> Certificate Import Wizard | × |
|---|--------|
| Welcome to the Certificate Import Wizard | |
| This wizard helps you copy certificates, certificate trust lists, and certificate revocation lists from your disk to a certificate store. | on |
| A certificate, which is issued by a certification authority, is a confirmation of your ider and contains information used to protect data or to establish secure network connections. A certificate store is the system area where certificates are kept. | ntity |
| Store Location Ourrent User | |
| O Local Machine | |
| To continue, click Next. | |
| | |
| Next | Cancel |

4. Select "Place all certificates in the following store" and click "Browse".

| ÷ | F Certificate Import Wizard | ^ |
|---|--|---|
| | Certificate Store Certificate stores are system areas where certificates are kept. | |
| | Windows can automatically select a certificate store, or you can specify a location for the certificate. | |
| | Automatically select the certificate store based on the type of certificate Place all certificates in the following store | |
| | Certificate store: | |
| | | |
| | | |
| | | |
| | Next | - |

11 / 15



5. Select "Trusted Root Certificate Authorities" and click "OK".



6. Click "Next".

| ← | 🖉 Certificate Import Wizard | × |
|---|---|----|
| | · · · · · · · · · · · · · · · · · · · | |
| | Certificate Store | |
| | Certificate stores are system areas where certificates are kept. | |
| | Windows can automatically select a certificate store, or you can specify a location for the certificate. | |
| | Automatically select the certificate store based on the type of certificate | |
| | O Place all certificates in the following store | |
| | Certificate store: | |
| | Trusted Root Certification Authorities Browse | |
| | | |
| | | |
| | | |
| | | |
| | | |
| | | |
| | | |
| | Next Canc | el |



7. Click "Finish" to complete the Certificate Import Wizard.

| ~ | | Certificate Import Wizard | | | × |
|----|---------|---|----------------------------|-----------------------------|-----|
| | | Completing the Certific | cate Imp | ort Wizard | |
| | | The certificate will be imported after | you click Fini | sh. | |
| | | | | | |
| | | Certificate Store Selected by User Content | Trusted Roc Certificate | t Certification Authorities | |
| | | | | | |
| | | | | | |
| | | | | | |
| | | | | | |
| | | | | | |
| | | | | Finish Can | cel |
| Ce | ertific | ate Import Wizard | × | | |
| | | | | | |
| | 1 | The import was success | ful. | | |
| | | O | (| | |



4. Enable HTTPS communication

1. In PACS Manager, make sure that the status of DICOMApp is "Stopped".

If the status of DICOMApp is "Running", click "Stop" to stop SonicDICOM PACS.

| Serv | er Databas | e Connection | License | Localization | 1 | | | |
|----------------------|-----------------|-----------------|-----------------|-----------------|--------|---------|-----------|--|
| Windows | Service | | | | | | | |
| DICON | App Stop | ped | | | | | Start | |
| viewer – | | | | | | | | |
| Acce | ss from this F | с | | | | | | |
| URL | . http://loo | | Open the viewer | | | | | |
| Access from other PC | | | | | | | | |
| URL | http://1 | 92.168.20.49/vi | ewer/ | | \sim | Open ti | ne viewer | |
| Defa | Default Account | | | | | | | |
| ID | : | admin | | | | | | |
| Pas: For | security purr | password | hange voi | ir initial nass | word | | | |
| 101 | secondy purp | oses, picase a | nunge you | ar milder pess | Nora. | | | |
| mport D | ICOM File | | | | | | | |
| | | | | | | | Browse | |
| 🗹 Incl | ude sub-fold | ers | | | | | Import | |
| | | | | | | | | |
| | | | | | | | | |
| | | | | | | | | |

2. In "Server" tab, check "Enable HTTPS". In "SSL Cert", select the Server Certificate that has been issued.



| Mana | ager | | | | | | | | | |
|------|---------------|--------------|------------|-------------|--------------|--|------|-------|--------|--|
| ome | Server | Database | Connectio | n License | Localization | | | | | |
| DI | ICOM Serv | er | | | | | | | | |
| | Data Path | | | | | | | Brows | e | |
| | Backup Pa | ith 1 | | | | | | Brows | e | |
| | Backup Path 2 | | | | | | | | Browse | |
| | Default Ch | naracter Set | A | SCII | | | ~ | | | |
| | Log Path | | | | | | | Brows | e | |
| | 2 | | 0 | Informatio | n 🔘 Warning | | r | | | |
| w | eb Server | | | | | | | | | |
| | 🗹 Enable | HTTP | Port Num | ber | 80 🔹 | | | | | |
| Г | 🗹 Enable | HTTPS | Port Num | iber | 443 🜩 | | | | | |
| | SSL | Cert (Store | : Local Ma | chine - My) | | | | | \sim | |
| Ц | | | | | | | | | | |
| | | | | | | | Save | • | Cancel | |
| | | | | | | | | | | |
| | | | | | | | | | | |
| | | | | | | | | | | |
| | | | | | | | | | | |

3. Click "Save" and start DICOMApp.

4. Access https://DESKTOP-XXX/viewer/

* Note: In "DESKTOP-XXX" above, be sure to enter the computer name you specified.

Do not enter the IP address here.

- We recommend that you bookmark this URL for easy access.

- When accessing from another PC, follow the <u>3. Import the certificate into Trusted Root</u> Certificate Authorities on that PC.