

# Configuration du BYOD sans fil SSID unique sous Windows et ISE

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## Introduction

Ce document décrit comment configurer le BYOD (Bring Your Own Device) sur Cisco Identity Services Engine (ISE) pour Windows Machine à l'aide d'un SSID unique et d'un SSID double.

## Conditions préalables

### Conditions requises

Cisco vous recommande de prendre connaissance des rubriques suivantes :

- Configuration de Cisco ISE version 3.0
- Configuration de Cisco WLC
- Fonctionnement du BYOD

### Components Used

Les informations contenues dans ce document sont basées sur les versions de matériel et de logiciel suivantes :

- Cisco ISE version 3.0
- Windows 10

- WLC et AP

The information in this document was created from the devices in a specific lab environment. All of the devices used in this document started with a cleared (default) configuration. Si votre réseau est en ligne, assurez-vous de bien comprendre l'incidence possible des commandes.

## Théorie

Dans le BYOD à SSID unique, un seul SSID est utilisé pour les deux embarquements des périphériques et, plus tard, pour donner un accès complet aux périphériques enregistrés. Tout d'abord, l'utilisateur se connecte au SSID à l'aide du nom d'utilisateur et du mot de passe ( MSCHAPv2 ). Une fois authentifié avec succès sur ISE, l'utilisateur est redirigé vers le portail BYOD. Une fois l'enregistrement du périphérique terminé, le client final télécharge NSA (Native Supplicant Assistant) depuis ISE . La NSA est installée sur le client final et télécharge le profil et le certificat d'ISE. La NSA configure le demandeur sans fil et le client installe le certificat. Le point de terminaison effectue une autre authentification au même SSID à l'aide du certificat téléchargé à l'aide d'EAP-TLS. ISE vérifie la nouvelle demande du client et vérifie la méthode EAP et l'enregistrement des périphériques et donne un accès complet au périphérique.

Étapes SSID unique pour le BYOD de Windows -

- Authentification EAP-MSCHAPv2 initiale
- Redirection vers le portail BYOD
- Enregistrement de périphérique
- Téléchargement NSA
- Téléchargement du profil
- Téléchargement du certificat
- Authentification EAP-TLS

## Configuration

### Configuration ISE

Étape 1. Ajoutez le périphérique réseau sur ISE et configuez RADIUS et la clé partagée.

Accédez à **ISE > Administration > Network Devices > Add Network Device**.

Étape 2. Créez un modèle de certificat pour les utilisateurs BYOD. Le modèle doit avoir l'authentification client Utilisation améliorée de la clé. Vous pouvez utiliser EAP\_Certificate\_Template par défaut.

Deployment	Licensing	Certificates	Logging	Maintenance	Upgrade	Health Checks	Backup & Restore	Admin Access	Settings
Edit Certificate Template									
<b>Certificate Management</b> Certificate Authority Overview Issued Certificates Certificate Authority Certifica... Internal CA Settings <b>Certificate Templates</b> External CA Settings		* Name	BYOD_Certificate_template						
		Description							
		Subject							
		Common Name (CN)	\$UserName\$ ⓘ						
		Organizational Unit (OU)	tac						
		Organization (O)	cisco						
		City (L)	bangalore						
		State (ST)	Karnataka						
		Country (C)	IN						
Subject Alternative Name (SAN)	<input type="button" value="::"/> MAC Address								
Key Type	RSA <input type="button" value="▼"/>								
Key Size	2048 <input type="button" value="▼"/>								
* SCEP RA Profile	ISE Internal CA <input type="button" value="▼"/>								
Valid Period	3652	Day(s) (Valid Range 1 - 3652)							
Extended Key Usage	<input checked="" type="checkbox"/> Client Authentication		<input type="checkbox"/> Server Authentication						

Étape 3. Créez un profil de demandeur natif pour un profil sans fil.

Accédez à **ISE > Work Centers > BYOD > Client Provisioning**. Cliquez sur **Ajouter** et choisissez **Profil de demandeur natif (NSP)** dans la liste déroulante.

Ici, le nom SSID doit être identique à celui que vous avez connecté avant d'effectuer un seul BYOD SSID. Sélectionnez le protocole TLS. Choisissez le modèle de certificat tel que créé à l'étape précédente ou utilisez le modèle EAP\_Certificate\_Template par défaut .

Sous Paramètres facultatifs, sélectionnez l'authentification utilisateur ou utilisateur et machine selon vos besoins. Dans cet exemple, il est configuré en tant qu'authentification utilisateur. Laissez les autres paramètres par défaut.

Overview    Identities    Identity Groups    Network Devices    Ext Id Sources    **Client Provisioning**    Portals & Components    Policy Elements    Policy Sets    Reports    More

<b>Client Provisioning Policy</b>	* Name <b>WirelessNSP</b>
Resources	Description
	Wireless Profile(s)
Operating System *	ALL
SSID Name *	<b>BYOD-Dot1x</b>
Proxy Auto-Config File URL	
Proxy Host/IP	
Proxy Port	
Security *	WPA2 Enterprise
Allowed Protocol *	<b>TLS</b>
Certificate Template	<b>BYOD_Certificate_template</b>
Optional Settings	
Windows Settings	
Authentication Mode <b>User</b>	

#### Étape 4. Créez une stratégie d'approvisionnement client pour le périphérique Windows.

Accédez à **ISE > Work Centers > BYOD > Client Provisioning > Client Provisioning Policy**. Sélectionnez le système d'exploitation en tant que **Windows ALL**. Sélectionnez **WinSPWizard 3.0.0.2 et NSP** créés à l'étape précédente.

Overview    Identities    Identity Groups    Network Devices    Ext Id Sources    **Client Provisioning**    Portals & Components    Policy Elements    Policy Sets    Reports    More

<b>Client Provisioning Policy</b>	<b>Client Provisioning Policy</b>					
Resources	<p>Define the Client Provisioning Policy to determine what users will receive upon login and user session initiation:  For Agent Configuration: version of agent, agent profile, agent compliance module, and/or agent customization package.  For Native Suplicant Configuration: wizard profile and/or wizard. Drag and drop rules to change the order.</p>					
	Rule Name	Identity Groups	Operating Systems	Other Conditions	Results	
<input checked="" type="checkbox"/>	IOS	If Any	and Apple iOS All	and Condition(s)	then Cisco-ISE-NSP	Edit
<input checked="" type="checkbox"/>	Android	If Any	and Android	and Condition(s)	then Cisco-ISE-NSP	Edit
<input checked="" type="checkbox"/>	Windows	If Any	<b>and Windows All</b>	and Condition(s)	<b>then WinSPWizard 3.0.0.2 And WirelessNSP</b>	<b>Edit</b>
<input checked="" type="checkbox"/>	MAC OS	If Any	and Mac OSX	and Condition(s)	then CiscoTemporalAgentOSX 4.8.00176 And MacOsXSPWizard	Edit
						Save
						Reset

#### Étape 5. Créez un profil d'autorisation pour les périphériques non enregistrés en tant que périphériques BYOD.

Accédez à **ISE > Policy > Policy Elements > Results > Authorization > Authorization Profiles > Add**.

Sous **Tâche commune**, sélectionnez **Approvisionnement du demandeur natif**. Définissez un nom de liste de contrôle d'accès Redirect créé sur le WLC et sélectionnez le portail BYOD. Ici, le portail par défaut est utilisé. Vous pouvez créer un portail BYOD personnalisé. Accédez à **ISE > Work Centers > BYOD > Portals and Components** et cliquez sur **Add**.

The screenshot shows the 'Results' tab of the 'Policy Elements' section. On the left sidebar, 'Authorization Profiles' is selected. The main area contains fields for Name ('BYOD\_Wireless\_Redirect'), Access Type ('ACCESS\_ACCEPT'), Network Device Profile ('Cisco'), and several optional checkboxes for Service Template, Track Movement, Agentless Posture, and Passive Identity Tracking. Below these, under 'Common Tasks', there is a checked checkbox for 'Web Redirection (CWA, MDM, NSP, CPP)' and a dropdown menu set to 'Native Suplicant Provisioning' with 'Value' set to 'BYOD Portal (default)'. A red box highlights the 'Name' field and the 'Web Redirection' task.

## Étape 6. Créez un profil de certificat.

Accédez à **ISE > Administration > External Identity Sources > Certificate Profile**. Créez un nouveau profil de certificat ou utilisez le profil de certificat par défaut.

The screenshot shows the 'External Identity Sources' tab of the 'Administration - Identity Management' section. Under 'External Identity Sources', 'Certificate Authentication F' is expanded, showing 'cert\_profile' selected. The main configuration area shows a 'Name' field set to 'cert\_profile'. Other fields include 'Identity Store' (set to '[not applicable]'), 'Use Identity From' (set to 'Certificate Attribute' with 'Subject - Common Name'), and 'Match Client Certificate Against' (set to 'Never'). A red box highlights the 'Name' field.

## Étape 7. Créez une séquence de source d'identité et sélectionnez le profil de certificat créé à l'étape précédente ou utilisez le profil de certificat par défaut. Cela est nécessaire lorsque les utilisateurs effectuent EAP-TLS après l'enregistrement BYOD pour obtenir un accès complet.

Identity Source Sequences List &gt; For\_Teap

## Identity Source Sequence

## Identity Source Sequence

\* Name

BYOD\_id\_Store

Description

## Certificate Based Authentication

 Select Certificate Authentication Profile

cert\_profile

## Authentication Search List

A set of identity sources that will be accessed in sequence until first authentication succeeds

Available

Internal Endpoints

Guest Users

Selected

Internal Users

ADJoinint

Étape 8. Créez un jeu de stratégies, une stratégie d'authentification et une stratégie d'autorisation.

Accédez à **ISE > Policy > Policy Sets**. Créez un jeu de stratégies et **enregistrez**.

Créez une stratégie d'authentification et sélectionnez la séquence de source d'identité créée à l'étape précédente.

Créez une stratégie d'autorisation. Vous devez créer deux stratégies.

1. Pour les périphériques qui ne sont pas enregistrés pour le BYOD. Donnez le profil de redirection créé à l'étape 5.
2. Périphériques enregistrés pour le BYOD et faisant EAP-TLS. Accorder un accès complet à ces périphériques.

Authentication Policy (1)

Status	Rule Name	Conditions	Use
<input type="checkbox"/>	Default		

BYOD\_id\_Store

> Options

Authorization Policy - Local Exceptions

Authorization Policy - Global Exceptions

Authorization Policy (3)

			Results	Profiles	Security Groups
Status	Rule Name	Conditions			
<input type="checkbox"/>	Full_Access	AND Network Access-EapAuthentication EQUALS EAP-TLS EndPoints-BYODRegistration EQUALS Yes	<input type="checkbox"/> PermitAccess	<span style="border: 1px solid red; padding: 2px;">Select from list</span>	
<input type="checkbox"/>	BYOD_Redirect	EndPoints-BYODRegistration EQUALS Unknown	<input type="checkbox"/> BYOD_Wireless_Redire...	<span style="border: 1px solid red; padding: 2px;">Select from list</span>	

## Configuration WLC

Étape 1. Configurez Radius Server sur WLC.

Accédez à Security > AAA > Radius > Authentication.

**RADIUS Authentication Servers > Edit**

**AAA**

- General
- RADIUS**
  - Authentication
  - Accounting
  - Auth Cached Users
  - Fallback
  - DNS
  - Downloaded AVP
- TACACS+
- LDAP
- Local Net Users
- MAC Filtering
- Disabled Clients**
  - User Login Policies
  - AP Policies
  - Password Policies

**Local EAP**

- Advanced EAP
- Priority Order
- Certificate
- Access Control Lists
- Wireless Protection Policies
- Web Auth
- TrustSec
- Local Policies
- Umbrella
- Advanced

**RADIUS Settings:**

- Server Index: 7
- Server Address(Ipv4/Ipv6): 10.106.32.119
- Shared Secret Format: ASCII
- Shared Secret: \*\*\*\*\*
- Confirm Shared Secret: \*\*\*\*\*
- Key Wrap:  (Designed for FIPS customers and requires a key wrap compliant RADIUS server)
- Apply Cisco ISE Default settings:
- Apply Cisco ACA Default settings:
- Port Number: 1812
- Server Status: Enabled
- Support for CoA: Enabled
- Server Timeout: 5 seconds
- Network User:  Enable
- Management:  Enable
- Management Retransmit Timeout: 5 seconds
- Tunnel Proxy:  Enable
- Realm List: RealList
- PAC Provisioning:  Enable
- IPSec:  Enable
- Cisco ACA:  Enable

Accédez à Sécurité > AAA > Rayon > Comptabilité.

The screenshot shows the Cisco Security interface under the 'AAA' section. The 'RADIUS' tab is selected. On the left, a navigation tree includes 'General', 'Authentication', 'Accounting', 'Auth Cached Users', 'Fallback', 'DNS', 'Downloaded AVP', 'TACACS+', 'LDAP', 'Local Net Users', 'MAC Filtering', 'Disabled Clients', 'User Login Policies', 'AP Policies', 'Password Policies', 'Local EAP', 'Advanced EAP', 'Priority Order', 'Certificate', 'Access Control Lists', 'Wireless Protection Policies', 'Web Auth', and 'TrustSec'. The 'RADIUS' section contains fields for 'Server Index' (7), 'Server Address(Ipv4/Ipv6)' (10.106.32.119), 'Shared Secret Format' (ASCII), 'Shared Secret' (redacted), 'Confirm Shared Secret' (redacted), 'Apply Cisco ACA Default settings' (unchecked), 'Port Number' (1813), 'Server Status' (Enabled), 'Server Timeout' (5 seconds), 'Network User' (checked), 'Management' (unchecked), 'Tunnel Proxy' (unchecked), 'Realm List' (link), 'PAC Provisioning' (unchecked), 'IPSec' (unchecked), and 'Cisco ACA' (unchecked). The 'Server Address' and 'Port Number' fields are highlighted with red boxes.

Étape 2. Configurez un SSID Dot1x.

The screenshot shows the Cisco WLANs interface under the 'WLANS' section. The 'WLANS' tab is selected. On the left, a navigation tree includes 'WLANS' (selected) and 'Advanced'. The 'WLANS' section contains tabs for 'General' (selected), 'Security', 'QoS', 'Policy-Mapping', and 'Advanced'. The 'General' tab shows fields for 'Profile Name' (BYOD-Dot1x), 'Type' (WLAN), 'SSID' (BYOD-Dot1x), and 'Status' (checked). The 'SSID' field is highlighted with a red box. Below these, 'Security Policies' are listed as [WPA2][Auth(802.1X)]. A note says '(Modifications done under security tab will appear after applying the changes.)'. Under 'Radio Policy', 'All' is selected from a dropdown. Under 'Interface/Interface Group(G)', 'management' is selected from a dropdown. Under 'Multicast Vlan Feature', 'Enabled' is unchecked. Under 'Broadcast SSID', 'Enabled' is checked. Under 'NAS-ID', 'none' is selected. Under 'Lobby Admin Access', there is an unchecked checkbox. The 'Interface/Interface Group(G)' dropdown is highlighted with a red box.

**CISCO**

MONITOR WLANS CONTROLLER WIRELESS SECURITY MANAGEMENT COMMANDS HELP FEEDBACK

WLANS WLANs > Edit 'BYOD-Dot1x'

**General Security QoS Policy-Mapping Advanced**

**Layer 2 Layer 3 AAA Servers**

**Layer 2 Security**

Security Type

MAC Filtering

**WPA2+WPA3 Parameters**

Policy	<input checked="" type="checkbox"/> WPA2	<input type="checkbox"/> WPA3		
Encryption Cipher	<input checked="" type="checkbox"/> CCMP128(AES)	<input type="checkbox"/> CCMP256	<input type="checkbox"/> GCMP128	<input type="checkbox"/> GCMP256

**Fast Transition**

Fast Transition	<input type="button" value="Adaptive"/>
Over the DS	<input checked="" type="checkbox"/>
Reassociation Timeout	20 Seconds

**Protected Management Frame**

PMF	<input type="button" value="Disabled"/>
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**Authentication Key Management** [19](#)

802.1X-SHA1	<input checked="" type="checkbox"/> Enable
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**CISCO**

MONITOR WLANS CONTROLLER WIRELESS SECURITY MANAGEMENT COMMANDS HELP FEEDBACK

WLANS WLANs > Edit 'BYOD-Dot1x'

**General Security QoS Policy-Mapping Advanced**

**Layer 2 Layer 3 AAA Servers**

Select AAA servers below to override use of default servers on this WLAN

**RADIUS Servers**

RADIUS Server Overwrite interface	<input type="checkbox"/> Enabled
Apply Cisco ISE Default Settings	<input checked="" type="checkbox"/> Enabled

**Authentication Servers**

<input checked="" type="checkbox"/> Enabled	<input checked="" type="checkbox"/> Enabled
Server 1 IP:10.106.32.119, Port:1812	IP:10.106.32.119, Port:1813
Server 2 None	None
Server 3 None	None
Server 4 None	None
Server 5 None	None
Server 6 None	None

**Accounting Servers**

<input checked="" type="checkbox"/> Enabled	<input checked="" type="checkbox"/> Enabled
Server 1 IP:10.106.32.119, Port:1812	IP:10.106.32.119, Port:1813
Server 2 None	None
Server 3 None	None
Server 4 None	None
Server 5 None	None
Server 6 None	None

**EAP Parameters**

Enable	<input type="checkbox"/>
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**Authorization ACA Server**

<input type="checkbox"/> Enabled	<input type="checkbox"/> Enabled
Server None	None

**Accounting ACA Server**

<input type="checkbox"/> Enabled	<input type="checkbox"/> Enabled
Server None	None

The screenshot shows the 'Advanced' tab of the 'BYOD-Dot1x' WLAN profile. The 'Allow AAA Override' checkbox is checked. Other settings include 'Coverage Hole Detection' (Enabled), 'Session Timeout' (1800 seconds), 'Client Exclusion' (Enabled, timeout 180 seconds), and 'Maximum Allowed Clients' (0). On the right, there are sections for 'DHCP' (DHCP Server, Override), 'Management Frame Protection (MFP)' (MFP Client Protection set to 'Optional'), and 'NAC' (NAC State set to 'ISE NAC').

Étape 3. Configurez la liste de contrôle d'accès Redirect pour fournir un accès limité pour le provisionnement du périphérique.

- Autoriser le trafic UDP vers DHCP et DNS (DHCP est autorisé par défaut).
- Communication avec ISE.
- Refuser tout autre trafic.

Name : BYOD-Initial (ou tout autre élément que vous avez appelé manuellement la liste de contrôle d'accès dans le profil d'autorisation)

The screenshot shows the 'Access Control Lists > Edit' page under the 'SECURITY' tab. A new access list named 'BYOD-Initial' is being created. The table below lists the rules:

Seq	Action	Source IP/Mask	Destination IP/Mask	Protocol	Source Port	Dest Port	DSCP	Direction	Number of Hits
1	Permit	0.0.0.0 / 0.0.0.0	0.0.0.0 / 0.0.0.0	UDP	Any	Any	Any	Any	0
2	Permit	0.0.0.0 / 0.0.0.0	10.106.32.119 / 255.255.255.255	Any	Any	Any	Any	Any	0
3	Permit	10.106.32.119 / 255.255.255.255	0.0.0.0 / 0.0.0.0	Any	Any	Any	Any	Any	0
4	Deny	0.0.0.0 / 0.0.0.0	0.0.0.0 / 0.0.0.0	Any	Any	Any	Any	Any	0

## Vérification

### Vérification du flux d'authentification

## Live Logs Live Sessions

Misconfigured Suplicants	Misconfigured Network Devices	RADIUS Drops	Client Stopped Responding	Repeat Counter
<span style="float: right;">Refresh Never Show Latest 20 records Within Last 5 minutes</span>				
0	0	1	0	0
Refresh	Reset Repeat Counts	Export To		Filter
Time	Status	Details	Repea...	Identity
Nov 29, 2020 11:13:47.4...		0	dot1xuser	Endpoint ID: 50:3E:AA:E4:8... Identity Group: Wireless Authentication Policy: Wireless >> Full_Access Authorization Profiles: PermitAccess
Nov 29, 2020 11:13:47.2...		0	dot1xuser	Endpoint ID: 50:3E:AA:E4:8... Identity Group: RegisteredDevices Authentication Policy: Wireless >> Full_Access Authorization Profiles: PermitAccess
Nov 29, 2020 11:10:57.9...		0	dot1xuser	Endpoint ID: 50:3E:AA:E4:8... Identity Group: Profiled Authentication Policy: Wireless >> BYOD_Redirect Authorization Profiles: BYOD_Wireless_Redirect

1. Lors de la première connexion, l'utilisateur effectue l'authentification PEAP à l'aide d'un nom d'utilisateur et d'un mot de passe. Sur ISE, l'utilisateur accède à la règle de redirection BYOD-Redirect.

**Cisco ISE**

## Overview

Event	5200 Authentication succeeded
Username	dot1xuser
Endpoint Id	50:3E:AA:E4:81:B6
Endpoint Profile	TP-LINK-Device
Authentication Policy	Wireless >> Default
Authorization Policy	Wireless >> BYOD_Redirect
Authorization Result	BYOD_Wireless_Redirect

**Authentication Details**

Source Timestamp	2020-11-29 11:10:57.955
Received Timestamp	2020-11-29 11:10:57.955
Policy Server	isee30-primary
Event	5200 Authentication succeeded
Username	dot1xuser
User Type	User
Endpoint Id	50:3E:AA:E4:81:B6
Calling Station Id	50-3e-aa-e4-81-b6
Endpoint Profile	TP-LINK-Device
Authentication Identity Store	Internal Users
Identity Group	Profiled
Audit Session Id	0a6a21b20000009a5fc3d3ad
Authentication Method	dot1x
Authentication Protocol	PEAP (EAP-MSCHAPv2)
Service Type	Framed
Network Device	WLC1

2. Après l'enregistrement BYOD, l'utilisateur est ajouté au périphérique enregistré et exécute maintenant EAP-TLS et obtient l'accès complet.

## Overview

Event	5200 Authentication succeeded
Username	dot1xuser
Endpoint Id	50:3E:AA:E4:81:B6 
Endpoint Profile	Windows10-Workstation
Authentication Policy	Wireless >> Default
Authorization Policy	Wireless >> Full_Acceess
Authorization Result	PermitAccess

**Authentication Details**

Source Timestamp	2020-11-29 11:13:47.246
Received Timestamp	2020-11-29 11:13:47.246
Policy Server	isee30-primary
Event	5200 Authentication succeeded
Username	dot1xuser
Endpoint Id	50:3E:AA:E4:81:B6
Calling Station Id	50-3e-aa-e4-81-b6
Endpoint Profile	Windows10-Workstation
Identity Group	RegisteredDevices
Audit Session Id	0a6a21b20000009a5fc3d3ad
Authentication Method	dot1x
Authentication Protocol	EAP-TLS
Service Type	Framed
Network Device	WLC1

**Vérifier le portail Mes périphériques**

Accédez au portail MyDevices et connectez-vous avec les informations d'identification. Vous pouvez voir le nom du périphérique et l'état d'enregistrement.

Vous pouvez créer une URL pour le portail MyDevices.

Accédez à **ISE > Work Centers > BYOD > Portal and Components > My Devices Portal > Login Settings**, puis saisissez l'URL complète.

The screenshot shows the Cisco My Devices Portal interface. At the top, there's a navigation bar with the Cisco logo and the text "My Devices Portal". On the right side of the header, there's a dropdown menu set to "dot1xuser" and a small info icon.

The main content area is titled "Manage Devices" and contains a brief instruction: "Need to add a device? Select **Add**. Was your device lost or stolen? Select your device from the list to manage it." Below this, it says "Number of registered devices: 2/5".

There are two buttons at the top left: "Add" (blue) and "Refresh" (grey). Below them is a search bar with a magnifying glass icon and the placeholder "MAC Address...".

A row of action buttons is present: Lost, Stolen, Edit, PIN Lock, Full Wipe, Unenroll, Reinstate, Delete, and a gear icon for settings. The "Delete" button is currently disabled.

The main table displays the following data:

<input type="checkbox"/> MAC Address	Device Name	Description	Status
<input type="checkbox"/> 50:3E:AA:E4:81:B6	<a href="#">MyWindows_Device</a>		Registered

## Dépannage

### Informations générales

Pour le processus BYOD, ces composants ISE doivent être activés dans le débogage sur les noeuds PSN -

**scep** - messages du journal scep. Fichier journal cible **guest.log et ise-psc.log**.

**client-webapp** - composant responsable des messages d'infrastructure. Fichier journal cible - **ise-psc.log**

**portal-web-action** - composant responsable du traitement de la stratégie de provisionnement du client. Fichier journal cible -**guest.log**.

**portail** - tous les événements liés au portail. Fichier journal cible **-guest.log**

**portal-session-manager** - Fichiers journaux cibles - **Messages de débogage liés à la session du portail - gues.log**

**ca-service** - ca-service messages -Fichiers journaux cibles -**caservice.log et caservice-misc.log**

**ca-service-cert** - ca-service certificate messages - Fichiers journaux cibles - **caservice.log et caservice-misc.log**

**admin-ca** - ca-service messages admin -**ise-psc.log** des fichiers journaux cibles, **caservice.log et caservice-misc.log**

**certprovisioningportal** - messages du portail d'approvisionnement de certificats - **Fichiers journaux cibles ise-psc.log**

**nsf** - Messages liés à NSF -Fichiers journaux cibles **ise-psc.log**

**nsf-session** - Messages liés au cache de session -Fichiers journaux cibles **ise-psc.log**

**runtime-AAA** - Tous les événements Runtime. Fichier journal cible - **prrt-server.log**.

Pour les journaux côté client :

Rechercher %temp%\spwProfileLog.txt (ex : C:\Users<nom d'utilisateur>\AppData\Local\Temp\spwProfileLog.txt)

## Analyse du journal de travail

### Journaux ISE

Initial Access-Accepct avec liste de contrôle d'accès redirigée et URL de redirection pour le portail BYOD.

Prnt-server.log-

```
Radius,2020-12-02 05:43:52,395,DEBUG,0x7f433e6b8700,cntx=0008590803,sesn=isee30-primary/392215758/699,CPMSessionID=0a6a21b20000009f5fc770c7,user=dot1xuser,CallingStationID=50-3e-aa-e4-81-b6,RADIUS PACKET:: Code=2 (AccessAccept) Identifier=254 Length=459 [1] User-Name - value: [dot1xuser] [25] Class - value: [****] [79] EAP-Message - value: [ñ [80] Message-Authenticator - value: [.2{w b  p05<Z] [26] cisco-av-pair - value: [url-redirect-acl=BYOD-Initial] [26] cisco-av-pair - value: [url-redirect=https://10.106.32.119:8443/portal/gateway?sessionId=0a6a21b20000009f5fc770c7&portal=7f8ac563-3304-4f25-845d-be9faac3c44f&action=nsp&token=53a2119de6893df6c6fca25c8d6bd061] [26] MS-MPPE-Send-Key - value: [****] [26] MS-MPPE-Recv-Key - value: [****] ,RADIUSHandler.cpp:2216
```

Lorsqu'un utilisateur final essaie de naviguer sur un site Web et a été redirigé par le WLC vers l'URL de redirection ISE.

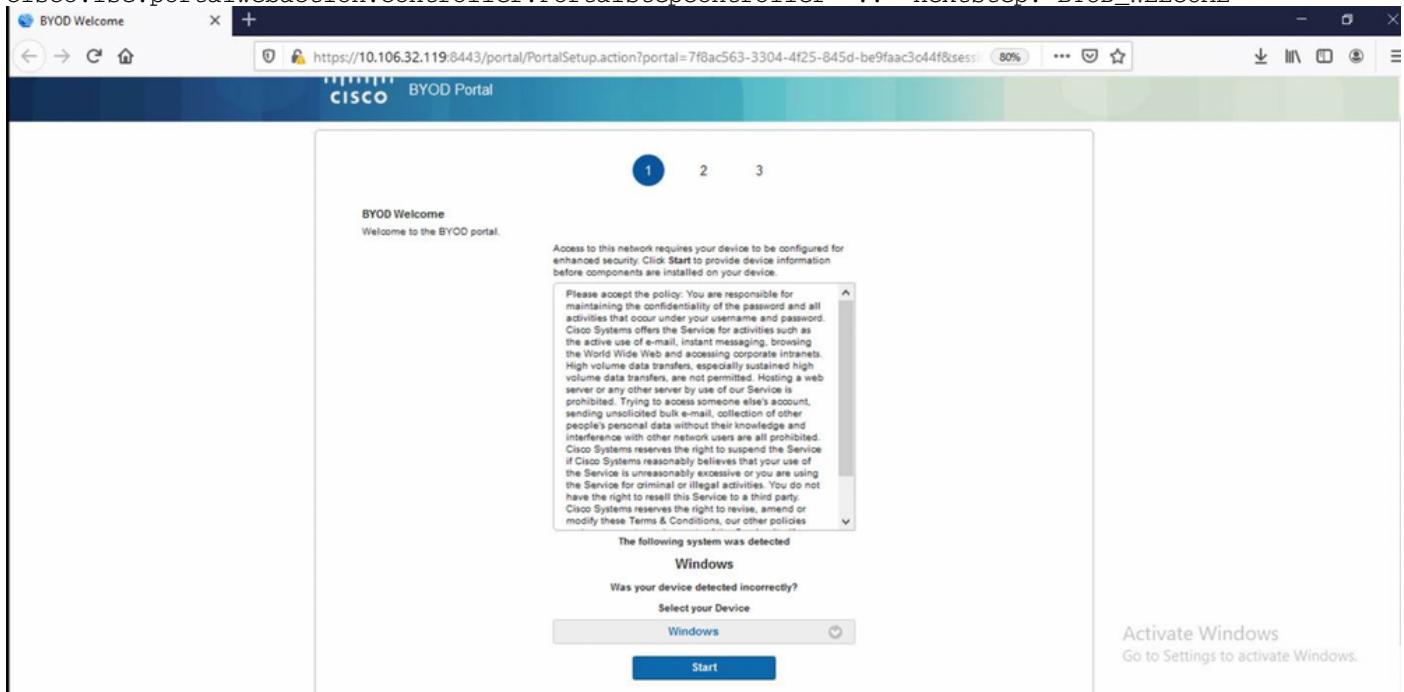
Guest.log -

```
2020-12-02 05:43:58,339 DEBUG [https-jsse-nio-10.106.32.119-8443-exec-5][] com.cisco.ise.portal.Gateway -::: Gateway Params (after update): redirect=www.msftconnecttest.com/redirect client_mac=null daysToExpiry=null ap_mac=null switch_url=null wlan=null action=nsp sessionId=0a6a21b20000009f5fc770c7 portal=7f8ac563-3304-4f25-845d-be9faac3c44f isExpired=null token=53a2119de6893df6c6fca25c8d6bd061 2020-12-02 05:43:58,339 DEBUG [https-jsse-nio-10.106.32.119-8443-exec-5][] cisco.ise.portalwebaction.utils.RadiusSessionUtil -::: sessionId=0a6a21b20000009f5fc770c7 : token=53a2119de6893df6c6fca25c8d6bd061 2020-12-02 05:43:58,339 DEBUG [https-jsse-nio-10.106.32.119-8443-exec-5][] cisco.ise.portalwebaction.utils.RadiusSessionUtil -::: Session token successfully validated. 2020-12-02 05:43:58,344 DEBUG [https-jsse-nio-10.106.32.119-8443-exec-5][] cisco.ise.portal.util.PortalUtils -::: UserAgent : Mozilla/5.0 (Windows NT 10.0; Win64; x64; rv:83.0) Gecko/20100101 Firefox/83.0 2020-12-02 05:43:58,344 DEBUG [https-jsse-nio-10.106.32.119-8443-exec-5][] cisco.ise.portal.util.PortalUtils -::: isMozilla: true 2020-12-02 05:43:58,344 DEBUG [https-jsse-nio-10.106.32.119-8443-exec-5][] com.cisco.ise.portal.Gateway -::: url: /portal/PortalSetup.action?portal=7f8ac563-3304-4f25-845d-be9faac3c44f&sessionId=0a6a21b20000009f5fc770c7&action=nsp&redirect=www.msftconnecttest.com%2FRedirect 2020-12-02 05:43:58,355 DEBUG [https-jsse-nio-10.106.32.119-8443-exec-7][] cisco.ise.portalwebaction.controller.PortalFlowInterceptor -::: start guest flow interceptor... 2020-12-02 05:43:58,356 DEBUG [https-jsse-nio-10.106.32.119-8443-exec-7][] cisco.ise.portalwebaction.actions.BasePortalAction -::: Executing action PortalSetup via request /portal/PortalSetup.action 2020-12-02 05:43:58,356 DEBUG [https-jsse-nio-10.106.32.119-8443-exec-7][] cisco.ise.portalwebaction.actions.PortalSetupAction -::: executeAction... 2020-12-02 05:43:58,360 DEBUG [https-jsse-nio-10.106.32.119-8443-exec-7][] cisco.ise.portalwebaction.actions.BasePortalAction -::: Result from action, PortalSetup: success 2020-12-02 05:43:58,360 DEBUG [https-jsse-nio-10.106.32.119-8443-exec-7][] cisco.ise.portalwebaction.actions.BasePortalAction -::: Action PortalSetup Complete for request /portal/PortalSetup.action 2020-12-02 05:43:58,360 DEBUG [https-jsse-nio-10.106.32.119-8443-exec-7][] cpm.guestaccess.flowmanager.processor.PortalFlowProcessor -::: Current flow step:
```

```

INIT, otherInfo=id: 226ea25b-5e45-43f5-b79d-fb59cab96def 2020-12-02 05:43:58,361 DEBUG [https-jsse-nio-10.106.32.119-8443-exec-7][] cpm.guestaccess.flowmanager.step.StepExecutor -::: Getting next flow step for INIT with TranEnum=PROCEED 2020-12-02 05:43:58,361 DEBUG [https-jsse-nio-10.106.32.119-8443-exec-7][] cpm.guestaccess.flowmanager.step.StepExecutor -::: StepTran for Step=INIT=> tranEnum=PROCEED, toStep=BYOD_WELCOME 2020-12-02 05:43:58,361 DEBUG [https-jsse-nio-10.106.32.119-8443-exec-7][] cpm.guestaccess.flowmanager.step.StepExecutor -::: Find Next Step=BYOD_WELCOME 2020-12-02 05:43:58,361 DEBUG [https-jsse-nio-10.106.32.119-8443-exec-7][] cpm.guestaccess.flowmanager.step.StepExecutor -::: Step : BYOD_WELCOME will be visible! 2020-12-02 05:43:58,361 DEBUG [https-jsse-nio-10.106.32.119-8443-exec-7][] cpm.guestaccess.flowmanager.step.StepExecutor -::: Returning next step =BYOD_WELCOME 2020-12-02 05:43:58,362 DEBUG [https-jsse-nio-10.106.32.119-8443-exec-7][] cpm.guestaccess.flowmanager.adaptor.PortalUserAdaptorFactory -::: Looking up Guest user with uniqueSubjectId=5f5592a4f67552b855ecc56160112db42cf7074e 2020-12-02 05:43:58,365 DEBUG [https-jsse-nio-10.106.32.119-8443-exec-7][] cpm.guestaccess.flowmanager.adaptor.PortalUserAdaptorFactory -::: Found Guest user 'dot1xuserin DB using uniqueSubjectID '5f5592a4f67552b855ecc56160112db42cf7074e''. authStoreName in DB=Internal Users, authStoreGUID in DB=9273fe30-8c01-11e6-996c-525400b48521. DB ID=bab8f27d-c44a-48f5-9fe4-5187047bfcc0 2020-12-02 05:43:58,366 DEBUG [https-jsse-nio-10.106.32.119-8443-exec-7][] cisco.ise.portalwebaction.controller.PortalStepController -::: +*** updatePortalState: PortalSession (e0d457d9-a346-4b6e-bcca-5cf29e12dacc) current state is INITIATED and current step is BYOD_WELCOME 2020-12-02 05:40:35,611 DEBUG [https-jsse-nio-10.106.32.119-8443-exec-6][] com.cisco.ise.portalSessionManager.PortalSession -::: Setting the portal session state to ACTIVE 2020-12-02 05:40:35,611 DEBUG [https-jsse-nio-10.106.32.119-8443-exec-6][] cisco.ise.portalwebaction.controller.PortalStepController -::: nextStep: BYOD_WELCOME

```



Cliquez sur **Démarrer** sur la page d'accueil du BYOD.

```

020-12-02 05:44:01,926 DEBUG [https-jsse-nio-10.106.32.119-8443-exec-3][] cisco.ise.portalwebaction.actions.BasePortalAction -:dot1xuser:- Executing action ByodStart via request /portal/ByodStart.action 2020-12-02 05:44:01,926 DEBUG [https-jsse-nio-10.106.32.119-8443-exec-3][] cisco.ise.portalwebaction.controller.PortalPreResultListener -:dot1xuser:- currentStep: BYOD_WELCOME

```

À ce stade, ISE évalue si les fichiers/ressources nécessaires pour le BYOD sont présents ou non et se met à l'état BYOD INIT.

```

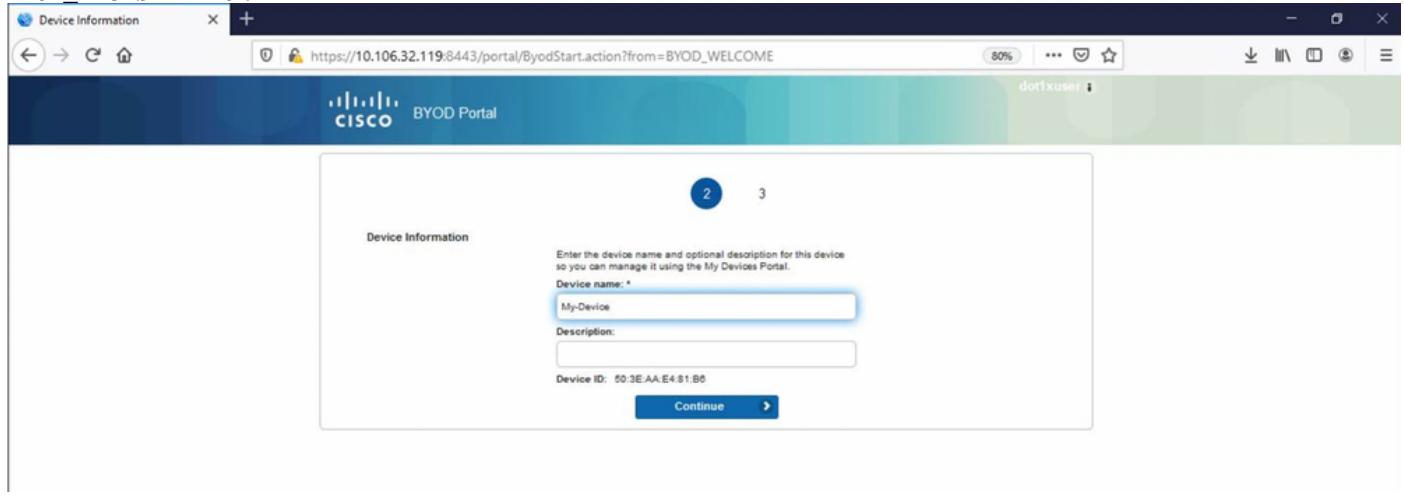
2020-12-02 05:44:01,936 DEBUG [https-jsse-nio-10.106.32.119-8443-exec-3][] guestaccess.flowmanager.step.guest.ByodWelcomeStepExecutor -:dot1xuser:- userAgent=Mozilla/5.0 (Windows NT 10.0; Win64; x64; rv:83.0) Gecko/20100101 Firefox/83.0, os=Windows 10 (All),

```

```

nspStatus=SUCCESS 2020-12-02 05:44:01,936 DEBUG [https-jsse-nio-10.106.32.119-8443-exec-3] []
guestaccess.flowmanager.step.guest.ByodWelcomeStepExecutor -:dot1xuser:- NSP Downloadable
Resource data=>, resource=DownloadableResourceInfo :WINDOWS_10_ALL
https://10.106.32.119:8443/auth/provisioning/download/a2b317ee-df5a-4bda-abc3-
e4ec38ee188c/WirelessNSP.xml?sessionId=0a6a21b20000009f5fc770c7&os=WINDOWS_10_ALL null null
https://10.106.32.119:8443/auth/provisioning/download/90a6dc9c-4aae-4431-a453-81141ec42d2d/ null
null https://10.106.32.119:8443/auth/provisioning/download/90a6dc9c-4aae-4431-a453-
81141ec42d2d/NetworkSetupAssistant.exe, coaType=NoCoa 2020-12-02 05:44:01,936 DEBUG [https-jsse-
nio-10.106.32.119-8443-exec-3][] cpm.guestaccess.flowmanager.utils.NSPPProvAccess -:dot1xuser:-
It is a WIN/MAC! 2020-12-02 05:44:01,936 DEBUG [https-jsse-nio-10.106.32.119-8443-exec-3][]]
cpm.guestaccess.flowmanager.step.StepExecutor -:dot1xuser:- Returning next step
=BYOD_REGISTRATION 2020-12-02 05:44:01,950 DEBUG [https-jsse-nio-10.106.32.119-8443-exec-3][]]
cisco.ise.portalwebaction.controller.PortalStepController -:dot1xuser:- +++++ updatePortalState:
PortalSession (e0d457d9-a346-4b6e-bcca-5cf29e12dacc) current state is ACTIVE and current step is
BYOD_REGISTRATION 2020-12-02 05:44:01,950 DEBUG [https-jsse-nio-10.106.32.119-8443-exec-3][]]
cisco.ise.portalwebaction.controller.PortalStepController -:dot1xuser:- nextStep:
BYOD_REGISTRATION

```

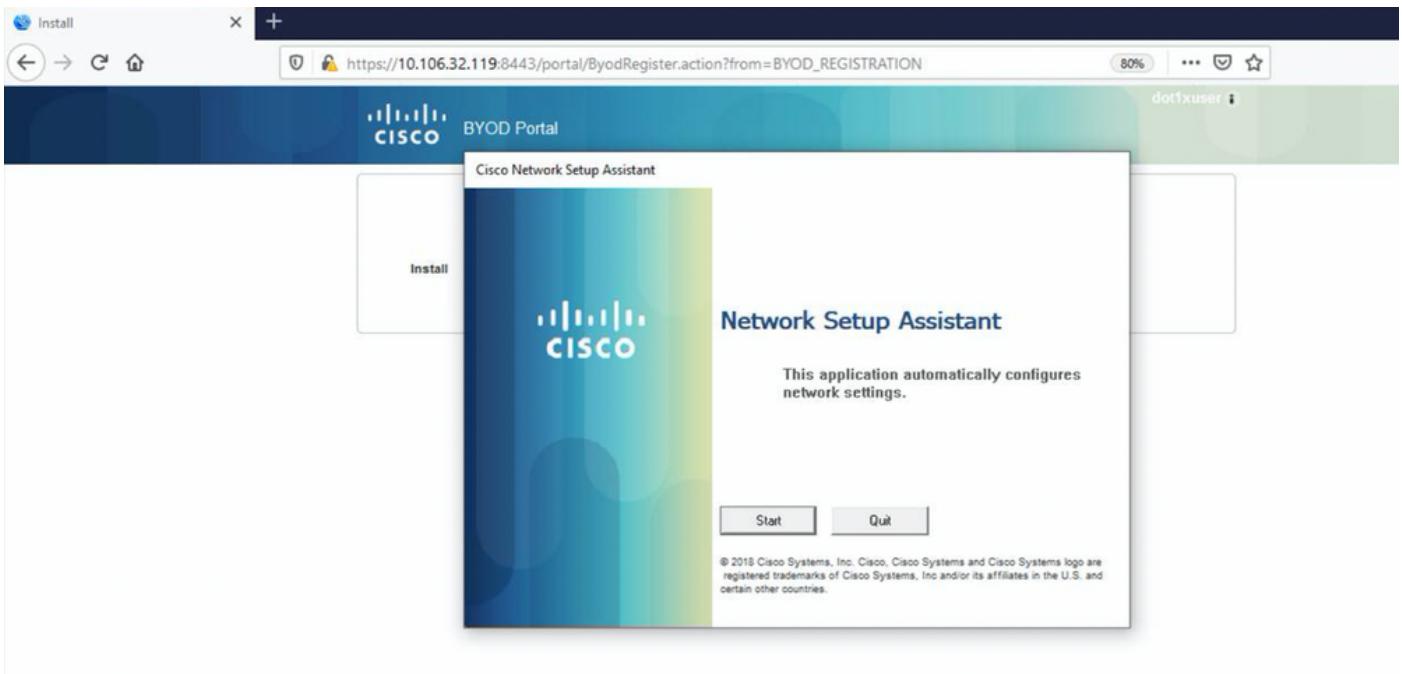


Saisissez le nom du périphérique et cliquez sur register.

```

2020-12-02 05:44:14,682 DEBUG [https-jsse-nio-10.106.32.119-8443-exec-1] []
cisco.ise.portalwebaction.actions.BasePortalAction -:dot1xuser:- Executing action ByodRegister
via request /portal/ByodRegister.action Request Parameters: from=BYOD_REGISTRATION
token=PZBMFBHX3FBPXT8QF98U717ILNOTD68D device.name=My-Device device.description= 2020-12-02
05:44:14,682 DEBUG [https-jsse-nio-10.106.32.119-8443-exec-1][]]
cisco.ise.portal.actions.ByodRegisterAction -:dot1xuser:- executeAction... 2020-12-02
05:44:14,682 DEBUG [https-jsse-nio-10.106.32.119-8443-exec-1][]]
cisco.ise.portalwebaction.actions.BasePortalAction -:dot1xuser:- Result from action,
ByodRegister: success 2020-12-02 05:44:14,682 DEBUG [https-jsse-nio-10.106.32.119-8443-exec-1][]]
cisco.ise.portalwebaction.actions.BasePortalAction -:dot1xuser:- Action ByodRegister Complete
for request /portal/ByodRegister.action 2020-12-02 05:44:14,683 DEBUG [https-jsse-nio-
10.106.32.119-8443-exec-1][] cpm.guestaccess.apiservices.mydevices.MyDevicesServiceImpl -
:dot1xuser:- Register Device : 50:3E:AA:E4:81:B6 username= dot1xuser idGroupID= aa13bb40-8bff-
11e6-996c-525400b48521 authStoreGUID= 9273fe30-8c01-11e6-996c-525400b48521 nadAddress=
10.106.33.178 isSameDeviceRegistered = false 2020-12-02 05:44:14,900 DEBUG [https-jsse-nio-
10.106.32.119-8443-exec-1][] cpm.guestaccess.flowmanager.step.StepExecutor -:dot1xuser:-
Returning next step =BYOD_INSTALL 2020-12-02 05:44:14,902 DEBUG [https-jsse-nio-10.106.32.119-
8443-exec-1][] cisco.ise.portalwebaction.controller.PortalStepController -:dot1xuser:- +++++
updatePortalState: PortalSession (e0d457d9-a346-4b6e-bcca-5cf29e12dacc) current state is ACTIVE
and current step is BYOD_INSTALL 2020-12-02 05:44:14,954 DEBUG [https-jsse-nio-10.106.32.119-
8443-exec-3][] cisco.ise.portalwebaction.controller.PortalFlowInterceptor -:dot1xuser:- result:
success 2020-12-02 05:44:14,969 DEBUG [https-jsse-nio-10.106.32.119-8443-exec-10][]]
cisco.cpm.client.provisioning.StreamingServlet -::: StreamingServlet
URI:/auth/provisioning/download/90a6dc9c-4aae-4431-a453-81141ec42d2d/NetworkSetupAssistant.exe

```



Maintenant, lorsque l'utilisateur clique sur Démarrer sur la NSA, un fichier nommé **spwProfile.xml** est créé temporairement sur le client copiant le contenu de Cisco-ISE-NSP.xml téléchargé sur le port TCP 8905.

Guest.log -

```
2020-12-02 05:45:03,275 DEBUG [portal-http-service15][]  
cisco.cpm.client.provisioning.StreamingServlet -:-: StreamingServlet  
URI:/auth/provisioning/download/a2b317ee-df5a-4bda-abc3-e4ec38ee188c/WirelessNSP.xml 2020-12-02  
05:45:03,275 DEBUG [portal-http-service15][] cisco.cpm.client.provisioning.StreamingServlet -:-:  
Streaming to ip:10.106.33.167 file type: NativeSPPProfile file name:WirelessNSP.xml 2020-12-02  
05:45:03,308 DEBUG [portal-http-service15][] cisco.cpm.client.provisioning.StreamingServlet -:-:  
SPW profile :: 2020-12-02 05:45:03,308 DEBUG [portal-http-service15][]  
cisco.cpm.client.provisioning.StreamingServlet -:-:
```

Après avoir lu le contenu du **fichier spwProfile.xml**, la NSA configure le profil réseau et génère un CSR, puis l'envoie à l'ISE pour obtenir un certificat à l'aide de l'URL

<https://10.106.32.119:8443/auth/pkiclient.exe>



## ise-psc.log-

```
2020-12-02 05:45:11,298 DEBUG [https-jsse-nio-10.106.32.119-8443-exec-1] []
cisco.cpm.provisioning.cert.CertProvisioningFactory -::::- Found incoming certificate request for
internal CA. Increasing Cert Request counter. 2020-12-02 05:45:11,331 DEBUG [https-jsse-nio-
10.106.32.119-8443-exec-1] [] cisco.cpm.provisioning.cert.CertProvisioningFactory -::::- Key type
is RSA, retrieving ScepCertRequestProcessor for caProfileName=ISE Internal CA 2020-12-02
05:45:11,331 DEBUG [https-jsse-nio-10.106.32.119-8443-exec-1] []
cisco.cpm.provisioning.cert.CertRequestValidator -::::- Session user has been set to = dot1xuser
2020-12-02 05:45:11,331 DEBUG [https-jsse-nio-10.106.32.119-8443-exec-1] []
cisco.cpm.scep.util.ScepUtil -::::- Algorithm OID in CSR: 1.2.840.113549.1.1.1 2020-12-02
05:45:11,331 INFO [https-jsse-nio-10.106.32.119-8443-exec-1] []
com.cisco.cpm.scep.ScepCertRequestProcessor -::::- About to forward certificate request
C=IN,ST=Karnataka,L=bangalore,O=cisco,OU=tac,CN=dot1xuser with transaction id n@P~N6E to server
http://127.0.0.1:9444/caservice/scep 2020-12-02 05:45:11,332 DEBUG [https-jsse-nio-
10.106.32.119-8443-exec-1] [] org.jscep.message.PkiMessageEncoder -::::- Encoding message:
org.jscep.message.PkcsReq@5c1649c2[transId=4d22d2e256a247a302e900ffa71c35d75610de67,messageType=
PKCS_REQ, senderNonce=Nonce
[7d9092a9fab204bd7600357e38309ee8],messageData=org.bouncycastle.pkcs.PKCS10CertificationRequest@
4662a5b0] 2020-12-02 05:45:11,332 DEBUG [https-jsse-nio-10.106.32.119-8443-exec-1] []
org.jscep.message.PkcsPkiEnvelopeEncoder -::::- Encrypting session key using key belonging to
[issuer=CN=Certificate Services Endpoint Sub CA - isee30-primary;
serial=162233386180991315074159441535479499152] 2020-12-02 05:45:11,333 DEBUG [https-jsse-nio-
10.106.32.119-8443-exec-1] [] org.jscep.message.PkiMessageEncoder -::::- Signing message using
key belonging to [issuer=CN=isee30-primary.anshsinh.local;
serial=126990069826611188711089996345828696375] 2020-12-02 05:45:11,333 DEBUG [https-jsse-nio-
10.106.32.119-8443-exec-1] [] org.jscep.message.PkiMessageEncoder -::::- SignatureAlgorithm
SHA1withRSA 2020-12-02 05:45:11,334 DEBUG [https-jsse-nio-10.106.32.119-8443-exec-1] []
org.jscep.message.PkiMessageEncoder -::::- Signing
org.bouncycastle.cms.CMSProcessableByteArray@5aa9dfcc content
```

## ca-service.log -

```
2020-12-02 05:45:11,379 DEBUG [CAService-Scep][scep job 4d22d2e256a247a302e900ffa71c35d75610de67
0x67ee11d5 request] com.cisco.cpm.caservice.CrValidator -::::- performing certificate request
validation: version [0] subject [C=IN,ST=Karnataka,L=bangalore,O=cisco,OU=tac,CN=dot1xuser] ---
output omitted--- 2020-12-02 05:45:11,379 DEBUG [CAService-Scep][scep job
4d22d2e256a247a302e900ffa71c35d75610de67 0x67ee11d5 request validation]
com.cisco.cpm.caservice.CrValidator -::::- RDN value = dot1xuser 2020-12-02 05:45:11,379 DEBUG
[CAService-Scep][scep job 4d22d2e256a247a302e900ffa71c35d75610de67 0x67ee11d5 request]
com.cisco.cpm.caservice.CrValidator -::::- request validation result CA_OK
```

## caservice-misc.log -

```
2020-12-02 05:45:11,380 DEBUG [CAService-Scep][scep job 4d22d2e256a247a302e900ffa71c35d75610de67
0x67ee11d5 request issuance] cisco.cpm.scep.util.ScepUtil -::::- Algorithm OID in CSR:
1.2.840.113549.1.1.1 2020-12-02 05:45:11,380 DEBUG [CAService-Scep][scep job
4d22d2e256a247a302e900ffa71c35d75610de67 0x67ee11d5 request issuance]
com.cisco.cpm.scep.CertRequestInfo -::::- Found challenge password with cert template ID.
```

## caservice.log -

```
2020-12-02 05:45:11,380 DEBUG [CAService-Scep][scep job 4d22d2e256a247a302e900ffa71c35d75610de67
0x67ee11d5 request issuance] cisco.cpm.caservice.util.CaServiceUtil -::::- Checking cache for
certificate template with ID: e2c32ce0-313d-11eb-b19e-e60300a810d5 2020-12-02 05:45:11,380 DEBUG
[CAService-Scep][scep job 4d22d2e256a247a302e900ffa71c35d75610de67 0x67ee11d5 request issuance]
com.cisco.cpm.caservice.CertificateAuthority -::::- CA SAN Extensions = GeneralNames: 1: 50-3E-
AA-E4-81-B6 2020-12-02 05:45:11,380 DEBUG [CAService-Scep][scep job
4d22d2e256a247a302e900ffa71c35d75610de67 0x67ee11d5 request issuance]
com.cisco.cpm.caservice.CertificateAuthority -::::- CA : add SAN extension... 2020-12-02
```

```
05:45:11,380 DEBUG [CAService-Scep] [scep job 4d22d2e256a247a302e900ffa71c35d75610de67 0x67ee11d5 request issuance] com.cisco.cpm.caservice.CertificateAuthority -:::::- CA Cert Template name = BYOD_Certificate_template 2020-12-02 05:45:11,395 DEBUG [CAService-Scep] [scep job 4d22d2e256a247a302e900ffa71c35d75610de67 0x67ee11d5 request issuance] cisco.cpm.caservice.util.CaServiceUtil -:::::- Storing certificate via REST for serial number: 518fa73a4c654df282ffdb026080de8d 2020-12-02 05:45:11,395 INFO [CAService-Scep] [scep job 4d22d2e256a247a302e900ffa71c35d75610de67 0x67ee11d5 request issuance] com.cisco.cpm.caservice.CertificateAuthority -:::::- issuing Certificate Services Endpoint Certificate: class [com.cisco.cpm.caservice.CaResultHolder] [1472377777]: result: [CA_OK] subject [CN=dot1xuser, OU=tac, O=cisco, L=bangalore, ST=Karnataka, C=IN] version [3] serial [0x518fa73a-4c654df2-82ffdb02-6080de8d] validity [after [2020-12-01T05:45:11+0000] before [2030-11-27T07:35:10+0000]] keyUsages [ digitalSignature nonRepudiation keyEncipherment ]
```

### ise-psc.log -

```
2020-12-02 05:45:11,407 DEBUG [AsyncHttpClient-15-9][] org.jscep.message.PkiMessageDecoder - ::::: Verifying message using key belonging to 'CN=Certificate Services Endpoint RA - isee30-primary'
```

### caservice.log -

```
2020-12-02 05:45:11,570 DEBUG [Infra-CAServiceUtil-Thread][] cisco.cpm.caservice.util.CaServiceUtil -:::::- Successfully stored endpoint certificate.
```

### ise-psc.log -



```
2020-12-02 05:45:13,381 DEBUG [https-jsse-nio-10.106.32.119-8443-exec-10][] com.cisco.cpm.provisioning.cert.CertProvisioningFactory -::::- Performing doGetCertInitial found Scep certificate processor for txn id n@P~N6E 2020-12-02 05:45:13,381 DEBUG [https-jsse-nio-10.106.32.119-8443-exec-10][] com.cisco.cpm.scep.ScepCertRequestProcessor -::::- Polling C=IN,ST=Karnataka,L=bangalore,O=cisco,OU=tac,CN=dot1xuser for certificate request n@P~N6E with id {} 2020-12-02 05:45:13,385 INFO [https-jsse-nio-10.106.32.119-8443-exec-10][] com.cisco.cpm.scep.ScepCertRequestProcessor -::::- Certificate request Complete for C=IN,ST=Karnataka,L=bangalore,O=cisco,OU=tac,CN=dot1xuser Trx Idn@P~N6E 2020-12-02 05:45:13,596 DEBUG [https-jsse-nio-10.106.32.119-8443-exec-10][] cisco.cpm.provisioning.cert.CertProvisioningFactory -::::- BYODStatus:COMPLETE_OTA_NSP
```

Après l'installation du certificat, les clients lancent une autre authentification à l'aide d'EAP-TLS et obtiennent un accès complet.

### prrt-server.log -

```
Eap,2020-12-02 05:46:57,175,INFO ,0x7f433e6b8700,cntx=0008591342,sesn=isee30-primary/392215758/701,CPMSessionID=0a6a21b20000009f5fc770c7,CallingStationID=50-3e-aa-e4-81-b6,EAP: Recv EAP packet, code=Response, identifier=64, type=EAP-TLS, length=166,EapParser.cpp:150 Radius,2020-12-0205:46:57,435,DEBUG,0x7f433e3b5700,cntx=0008591362,sesn=isee30-primary/392215758/701,CPMSessionID=0a6a21b20000009f5fc770c7,user=dot1xuser,CallingStationID=50-3e-aa-e4-81-b6,RADIUS PACKET:: Code=2(AccessAccept) Identifier=5 Length=231 [1] User-Name - value: [dot1xuser] [25] Class - value: [****] [79] EAP-Message - value: [E [80] Message-Authenticator - value: [Ù(ØyËöžö|kô,,)] [26] MS-MPPE-Send-Key - value: [****] [26] MS-MPPE-Recv-Key - value: [****] ,RADIUSHandler.cpp:2216
```

## Journaux client (journaux spw)

Le client commence à télécharger le profil.

```
[Mon Nov 30 03:34:27 2020] Downloading profile configuration... [Mon Nov 30 03:34:27 2020] Discovering ISE using default gateway [Mon Nov 30 03:34:27 2020] Identifying wired and wireless network interfaces, total active interfaces: 1 [Mon Nov 30 03:34:27 2020] Network interface - mac:50-3E-AA-E4-81-B6, name: Wi-Fi 2, type: unknown [Mon Nov 30 03:34:27 2020] Identified default gateway: 10.106.33.1 [Mon Nov 30 03:34:27 2020] Identified default gateway: 10.106.33.1, mac address: 50-3E-AA-E4-81-B6 [Mon Nov 30 03:34:27 2020] DiscoverISE - start [Mon Nov 30 03:34:27 2020] DiscoverISE input parameter : strUrl [http://10.106.33.1/auth/discovery] [Mon Nov 30 03:34:27 2020] [HTTPConnection] CrackUrl: host = 10.106.33.1, path = /auth/discovery, user = , port = 80, scheme = 3, flags = 0 [Mon Nov 30 03:34:27 2020] [HTTPConnection] HttpSendRequest: header = Accept: */* headerLength = 12 data = dataLength = 0 [Mon Nov 30 03:34:27 2020] HTTP Response header: [HTTP/1.1 200 OK Location:  
https://10.106.32.119:8443/portal/gateway?sessionId=0a6a21b20000009c5fc4fb5e&portal=7f8ac563-3304-4f25-845d-be9faac3c44f&action=nsp&token=29354d43962243bcb72193cbf9dc3260&redirect=10.106.33.1/auth/discovery [Mon Nov 30 03:34:36 2020] [HTTPConnection] CrackUrl: host = 10.106.32.119, path = /auth/provisioning/download/a2b317ee-df5a-4bda-abc3-e4ec38ee188c/WirelessNSP.xml?sessionId=0a6a21b20000009c5fc4fb5e&os=WINDOWS_10_ALL, user = , port = 8443, scheme = 4, flags = 8388608 Mon Nov 30 03:34:36 2020] parsing wireless connection setting [Mon Nov 30 03:34:36 2020] Certificate template: [keytype:RSA, keysize:2048, subject:OU=tac;O=cisco;L=bangalore;ST=Karnataka;C=IN, SAN:MAC] [Mon Nov 30 03:34:36 2020] set ChallengePwd
```

Client Vérifie si le service WLAN est en cours d'exécution.

```
[Mon Nov 30 03:34:36 2020] WirelessProfile::StartWLanSvc - Start [Mon Nov 30 03:34:36 2020] Wlansvc service is in Auto mode ... [Mon Nov 30 03:34:36 2020] Wlansvc is running in auto mode... [Mon Nov 30 03:34:36 2020] WirelessProfile::StartWLanSvc - End [Mon Nov 30 03:34:36 2020] Wireless interface 1 - Desc: [TP-Link Wireless USB Adapter], Guid: [{65E78DDE-E3F1-4640-906B-15215F986CAA}]... [Mon Nov 30 03:34:36 2020] Wireless interface - Mac address: 50-3E-AA-E4-81-B6 [Mon Nov 30 03:34:36 2020] Identifying wired and wireless interfaces... [Mon Nov 30 03:34:36 2020] Found wireless interface - [ name:Wi-Fi 2, mac address:50-3E-AA-E4-81-B6] [Mon Nov 30 03:34:36 2020] Wireless interface [Wi-Fi 2] will be configured... [Mon Nov 30 03:34:37 2020] Host - [ name:DESKTOP-965F94U, mac addresses:50-3E-AA-E4-81-B6]
```

Le client commence à appliquer le profil -

```
[Mon Nov 30 03:34:37 2020] ApplyProfile - Start... [Mon Nov 30 03:34:37 2020] User Id: dot1xuser, sessionid: 0a6a21b20000009c5fc4fb5e, Mac: 50-3E-AA-E4-81-B6, profile: WirelessNSP [Mon Nov 30 03:34:37 2020] number of wireless connections to configure: 1 [Mon Nov 30 03:34:37 2020] starting configuration for SSID : [BYOD-Dot1x] [Mon Nov 30 03:34:37 2020] applying certificate for ssid [BYOD-Dot1x]
```

Certificat d'installation du client.

```
[Mon Nov 30 03:34:37 2020] ApplyCert - Start... [Mon Nov 30 03:34:37 2020] using ChallengePwd  
[Mon Nov 30 03:34:37 2020] creating certificate with subject = dot1xuser and subjectSuffix =  
OU=tac;O=cisco;L=bangalore;ST=Karnataka;C=IN [Mon Nov 30 03:34:38 2020] Self signed certificate  
[Mon Nov 30 03:34:44 2020] Installed [isee30-primary.anshsinh.local, hash: 5b a2 08 1e 17 cb 73  
5f ba 5b 9f a2 2d 3b fc d2 86 0d a5 9b ] as rootCA [Mon Nov 30 03:34:44 2020] Installed CA cert  
for authMode machineOrUser - Success Certificate is downloaded . Omitted for brevity - [Mon Nov  
30 03:34:50 2020] creating response file name C:\Users\admin\AppData\Local\Temp\response.cer  
[Mon Nov 30 03:34:50 2020] Certificate issued - successfully [Mon Nov 30 03:34:50 2020]  
ScepWrapper::InstallCert start [Mon Nov 30 03:34:50 2020] ScepWrapper::InstallCert: Reading scep  
response file [C:\Users\admin\AppData\Local\Temp\response.cer]. [Mon Nov 30 03:34:51 2020]  
ScepWrapper::InstallCert GetCertHash -- return val 1 [Mon Nov 30 03:34:51 2020]  
ScepWrapper::InstallCert end [Mon Nov 30 03:34:51 2020] ApplyCert - End... [Mon Nov 30 03:34:51  
2020] applied user certificate using template id e2c32ce0-313d-11eb-b19e-e60300a810d5
```

## ISE configure le profil sans fil

```
[Mon Nov 30 03:34:51 2020] Configuring wireless profiles... [Mon Nov 30 03:34:51 2020]  
Configuring ssid [BYOD-Dot1x] [Mon Nov 30 03:34:51 2020] WirelessProfile::SetWirelessProfile -  
Start [Mon Nov 30 03:34:51 2020] TLS - TrustedRootCA Hash: [ 5b a2 08 1e 17 cb 73 5f ba 5b 9f a2  
2d 3b fc d2 86 0d a5 9b]
```

### profil

```
Wireless interface successfully initiated, continuing to configure SSID [Mon Nov 30 03:34:51  
2020] Currently connected to SSID: [BYOD-Dot1x] [Mon Nov 30 03:34:51 2020] Wireless profile:  
[BYOD-Dot1x] configured successfully [Mon Nov 30 03:34:51 2020] Connect to SSID [Mon Nov 30  
03:34:51 2020] Successfully connected profile: [BYOD-Dot1x] [Mon Nov 30 03:34:51 2020]  
WirelessProfile::SetWirelessProfile. - End [Mon Nov 30 03:35:21 2020]  
WirelessProfile::IsSingleSSID - Start [Mon Nov 30 03:35:21 2020] Currently connected to SSID:  
[BYOD-Dot1x], profile ssid: [BYOD-Dot1x], Single SSID [Mon Nov 30 03:35:21 2020]  
WirelessProfile::IsSingleSSID - End [Mon Nov 30 03:36:07 2020] Device configured successfully.
```