

## About this Guide

This Quick Start Guide provides instructions and reference material for getting started with the Nomadix Edge Gateway Products.

## **Documentation and Technical Support**

For more detailed information about the individual gateways and all other Nomadix Product Documentation, User Guide, XML DTD, MIB and Radius Dictionary can be found using the following URL:

http://www.nomadix.com/technical-support-documentation

If you have any problems, please contact our technical support team at +1.818.575.2590, or via email:

#### support@nomadix.com

## Included with each Edge Gateway

The following is what is included with the Edge Gateway and optional items that can be ordered separately.

Included with the EG 3000							
Qty	Description			Comments			
1	Power	Cord for AC Adap	oter - C5 to NEMA 5-15P - 1.8m - US/CA/MX/JP	Other countries are sold separately.			
1	19" Ra	ack Mount Bracket	s Kit and screws.				
1	Bumpe	er Kit for desktop i	nstallations.				
optional items available and sold separately							
Part Number I			Description				
	715-4001-010		Power Cord for AC Adapter - C5 to CEE 7/7 - 1.8m - EU/RU				
Count Specif	ry ic	715-4001-011	Power Cord for AC Adapter - C5 to NEMA 5-15P -	1.8m - US/CA/MX/JP			
Power Ca	Power Cables 715-4001-012		Power Cord for AC Adapter - C5 to BS 1363-1/SASO 2203:2003 - 1.8m - UK/IE/SG/HK/Arabia				
		715-4001-013	Power Cord for AC Adapter - C5 to GB2099, AS/N	IZS 3112 - 1.8m - CN/AU/NZ/AR			
	715-4001-014 Power Cord for AC Adapter - C5 to SANS 164-3 -		Power Cord for AC Adapter - C5 to SANS 164-3 -	1.8m - IN/ZA			
PMS 715-5001-001 EG-Series PMS Serial Interface Kit (Incl. cable and optical isolator)			d optical isolator)				

Included with the EG 6000						
Qty		Description	Comments			
1	Power Cord - C13 to NE	EMA 5-15P - 1.8m - US/CA/MX/JP	Other countries are sold separately.			
1	19" Rack Mount Bracke	ts Kit and screws.				
1	Bumper Kit for desktop installations.					
	·	optional Items available and sold separate	ely			
	Part Number	Description				
	715-4001-003	Power Cord - C13 to CEE 7/7 - 1.8m - EU/RU				
715-4001-004 Power Cord - C13 to NEMA 5-15P - 1.8m - US/CA/MX/JP		/MX/JP				



# EG 3000 AND EG 6000 QUICK START GUIDE

Country	715-4001-005	Power Cord - C13 to BS 1363-1/SASO 2203:2003 - 1.8m - UK/IE/SG/HK/Arabia
Power Cables	715-4001-006	Power Cord - C13 to GB2099, AS/NZS 3112 - 1.8m - CN/AU/NZ/AR
	715-4001-007	Power Cord - C13 to SABS 164-1 - 1.8m - IN/ZA
PMS	715-5001-010	EG-Series PMS Serial Interface Kit

## Installation

- 1. Unpack the Nomadix Edge Gateway and place the product on a flat and stable work surface.
- 2. Register the Gateway for support services by completing and returning the Nomadix Gateway Registration Form online at the following URL:

https://nomadix.com/product-registration/

3. Install the Edge Gateway into the 19" rack.



- 4. Connect the AC mains power cord.
- 5. The Gateway is now ready for initialization.

## Initializing the Gateway

## **ETH1 Ethernet Port Connection**

Configure the laptop's network setting to use the following Administration IP address settings [Table 1].

IP Address	Netmask	Gateway	DNS (if needed)	
172.30.30.173	255.255.0.0	172.30.30.172	4.2.2.1	

 Table 1: Administrative IP address

Attach the laptop to the Nomadix ETH1 port using an Ethernet cable and check the status as shown below.





Figure 1: Ethernet Connection

On the PC/laptop open an SSH (Secure Shell) client connection using PuTTY, Hyperterm, Procomm (or equivalent) to the EG 3000 or EG 6000 using the Gateway's default IP address 172.30.30.172.

With everything connected and powered up, you are now ready to configure the Gateway's WAN for a static IP address, DHCP Client or PPPoE client using the appropriate configuration guidelines that follow in order to obtain the license key.

Go to Initial (startup) Configuration.

Once the key has been obtained, the web management interface (WMI) can be used to continue and finish the configuration.



#### Initial (startup) Configuration

Log in to the Gateway, by opening an SSH to 172.30.30.172 using the default Login= admin and password= admin. Type y[es] when prompted to configure settings.

The initial minimal WAN port configuration mode will be displayed as shown in Figure 3.



Figure 3: Initial minimal WAN port configuration.

Select the desired configuration mode and use the following steps to configure the WAN port for either Static IP, DHCP client or PPPoE.

#### Step 1a: Static WAN IP Configuration

Accept static as the default configuration mode and enter the following mandatory settings shown in Figure 4.

```
COM3 - PuTTY
                                                                                       X
NO LICENSE KEY HAS BEEN ENTERED. A LICENSE KEY MUST BE ENTERED
                                                                                                ~
IN ORDER TO PROCEED WITH INSTALLATION.
SEE USER'S GUIDE FOR LICENSE KEY INFORMATION.
INSTALLATION WILL NOW TRY TO CONTACT THE NOMADIX LICENSE KEY SERVER.
IN ORDER TO PROCEED, THE NSE MUST BE ABLE TO CONNECT TO THE INTERNET.
DO YOU WANT TO CONFIGURE THE NSE'S IP AND DNS SETTINGS? [yes/no]: y
Configuring minimal WAN interface connectivity parameters:
                                  [static ] (static, dhcp, pppoe) : S
[67.130.148.85 ] : Enter WAN Ports IP Address
Configuration Mode
IP Address
                                  [255.255.255.0] : Enter WAN Ports Subnet Mask
Subnet Mask
                                  [67.130.148.254 ] : Enter WAN Ports Gateway IP Address
Gateway IP Address
WAN 802.10 tagging
                                  [Disabled
                                                   1:
VLAN ID
                                  [1
DNS Domain Name
                                 [nomadix2.com
                                                   1 :
DNS IPv4 Server 1
                                  [67.130.148.253 ] : Enter Primary DNS IP Address
DNS IPv4 Server 2
                                  [8.8.8.8
                                                   1 :
DNS IPv4 Server 3
                                  [216.146.35.35 ] :
DNS IPv6 Server 1
                                  [::
                                                   1 :
DNS IPv6 Server 2
                                  [::
                                                   1 :
DNS IPv6 Server 3
                                  [::]
                                                   1 :
```

Figure 4: Initial WAN port settings



A WAN port summary page will then be displayed as shown in Figure 5.

🗬 COM3 - PuTTY		-	×
Port Name	: WAN		^
Port Label	: WAN		
Port Role	: wanIf		
IPv6	: Disabled		
Configuration Mode	: static		
IP Address	: IP Address entered		
Subnet Mask	: Subnet Mask entered		
Gateway IP Address	: Gateway IP Address entered		
WAN 802.1Q tagging	: Disabled		
VLAN ID	: 1		
DNS Domain Name	: nomadix2.com		
DNS IPv4 Server 1	: DNS IP Address entered		
DNS IPv4 Server 2	: 8.8.8.8		
DNS IPv4 Server 3	: 216.146.35.35		
DNS IPv6 Server 1	: ::		
DNS IPv6 Server 2	: ::		
DNS IPv6 Server 3	: ::		
Additional NAT IP addresses	: Disabled		
show all	- Show all WAN Interface configuration		
show interface <name></name>	<ul> <li>Show a single WAN Interface configuration</li> </ul>		
modify interface <name></name>	- Modify a single WAN Interface configuration		
Type b to go back, <esc> to</esc>	abort, ? for help.		
Ethernet port/WAN interface	configuration>		~

**Figure 5:** WAN port static IP configuration summary page

If everything is correct in the summary, type **b**[ack] to return to the previous menu and proceed to Step 2 to enter the location information.

Otherwise, select an option from the Ethernet port configuration menu to display or make changes to the WAN port settings. When finished with the settings, type **b**[ack] to return to the previous menu and proceed to Step 2 to enter the location information.

#### **Step 1b: DHCP Client Configuration**





A WAN port summary page will then be displayed as shown in the example Figure 7.

PuTTY			—	×
Port Name	:	WAN		^
Port Label	:	WAN		
Port Role	:	wanIf		
IPv6	:	Disabled		
Configuration Mode	:	dhcp		
IP Address	:	0.0.0.0		
Subnet Mask	:	0.0.0.0		
Gateway IP Address	:	0.0.0.0		
WAN 802.10 tagging	:	Disabled		
VLAN ID	:	1		
DNS Domain Name	:	nomadix2.com		
DNS IPv4 Server 1	:	67.130.148.253		
DNS IPv4 Server 2	:	8.8.8		
DNS IPv4 Server 3	:	216.146.35.35		
DNS IPv6 Server 1	:	::		
DNS IPv6 Server 2	:	::		
DNS IPv6 Server 3	:	::		
Additional NAT IP addresses	:	Disabled		
show all	- s	how all WAN Interface configuration		
show interface <name></name>	- s	how a single WAN Interface configuration		
modify interface <name></name>	- M	odify a single WAN Interface configuration		
Type b to go back. <esc> to</esc>	abo	rt. 2 for belp.		
The set of ge back, (coor of				- 11
Ethernet port/WAN interface	con	figuration>		~

Figure 7: WAN port DHCP client configuration summary page

If everything is correct in the summary, type **b**[ack] to return to the previous menu and proceed to Step 2 to enter the location information.

Otherwise, select an option from the Ethernet port configuration menu to display or make changes to the WAN port settings. When finished with the settings, type **b**[ack] to return to the previous menu and proceed to Step 2 to enter the location information.

## Step 1c: PPPoE Dynamic IP Client Configuration

Enter **p**[ppoe] when prompted. Enter the following **mandatory** settings for a PPPoE connection with dynamic PPP IP configuration shown in **Figure 8**.

PuTTY		- 0	×
Configuration Mode	[dhcp	] (static, dhcp, pppoe) : p	^
PPPoE Service Name	[	] : ("none" to clear) : Service Name	
LCP Echo-Request Interval	[30	1:	
Maximum LCP Non-responses	[6	]:	
PPP Authentication User Name	[	] : ("none" to clear) : Username	
PPP Authentication Password	[	] : ("none" to clear) : Password	
PPP IP Configuation Mode	[dynamic	] (dynamic, static) :	
PPP Static IP Address	[0.0.0.0	1:	
PPP Maximum TCP MSS	[1452	1:	
WAN 802.1Q tagging	[Disabled	]:	
VLAN ID	[10	1:	
DNS Domain Name	[nomadix2.com	1:	
DNS IPv4 Server 3	[216.146.35.35	1:	
DNS IPv6 Server 1	[::	1:	
DNS IPv6 Server 2	[::	1:	_
DNS IPv6 Server 3	[::	1:	
			~

Figure 8: Selecting PPPoE with dynamic IP configuration



Real COM3 - PuTTY Х Port Name : WAN ^ Port Label · WAN Port Role : wanIf IPv6 : Disabled Configuration Mode : pppoe IP Address : 0.0.0.0 Subnet Mask : 0.0.0.0 Gateway IP Address : 0.0.0.0 PPPoE Service Name : : 30 LCP Echo-Request Interval Maximum LCP Non-responses : 6 PPP Authentication User Name : PPP Authentication Password : PPP IP Configuation Mode : dynamic : 0.0.0.0 PPP Static IP Address : 1452 PPP Maximum TCP MSS WAN 802.1Q tagging : Disabled VLAN ID : 10 DNS Domain Name : nomadix2.com DNS IPv4 Server 1 : 67.130.148.253 DNS IPv4 Server 2 : 8.8.8.8 DNS IPv4 Server 3 : 216.146.35.35 DNS IPv6 Server 1 1 1 1 1 DNS IPv6 Server 2 : :: DNS IPv6 Server 3 : :: Additional NAT IP addresses : Disabled show all - Show all WAN Interface configuration show interface <name> - Show a single WAN Interface configuration modify interface <name> - Modify a single WAN Interface configuration Type b to go back, <esc> to abort, ? for help. Ethernet port/WAN interface configuration>

A WAN port summary page will then be displayed as shown in Figure 9.

Figure 9: WAN port PPPoE client configuration summary page

#### Step 1d: PPPoE Static IP Client Configuration

Use the same steps for configuring dynamic PPPoE shown in **Figure 8** above, but select static for PPP IP Configuration Mode, and enter your IP address for *PPP Static IP Address*. A summary page similar to **Figure 9** above will be displayed.

If everything is correct in the summary, type **b**[ack] to return to the previous menu and proceed to Step 2 to enter the location information.

Otherwise, select an option from the Ethernet port configuration menu to display or make changes to the WAN port settings. When finished with the settings, type **b**[ack] to return to the previous menu and proceed to Step 2 to enter the location information.



## **Step 2: Entering Your Location Information**

You will be required to enter location information to obtain the license key. Enter the following **mandatory** location information details shown in **Figure 10**.

🛃 COI	/3 - PuTTY		-		×	
					^	
Ethern	et port/WAN interface config	uration>b				
Please	enter your Company Name	[Nomadix ]: ente	er company name			
Please	enter your Site Name	[USLAXDOCOM-USG2 ]: ente	er site name			
Please	enter your Address (Line 1)	[30851 Agoura Rd. ]: ente	er address			
	(Line 2)	[ ]:				
	(City)	[Agorua Hills ]:				
	(State)	[CA ]:				
	(ZIP/Postal Code)	[91301 ]:				
	(Country)	[USA ]: ente	er country			
Please	select the venue type that	most reflects your location				
	1. Apartment					
	<ol> <li>Bar/Coffeeshop/Restaur</li> </ol>	ant				
	<ol> <li>Convention Center</li> </ol>					
	<ol> <li>Corporate Guest Access</li> </ol>					
	5. Education					
	<ol><li>Hospitality</li></ol>					
	<ol><li>Marina/Camp Ground</li></ol>					
	8. Public Space					
	9. Public Transport					
	10. Airport					
	ll. Truckstop / Rest Area					
	12. Car Rental Facility					
	13. Club					
	14. Health Club					
	15. Bar					
	16. Retail Business					
	17. Marina					
	18. Arena					
	19. Theatre					
	20. Metro Area / HotZone					
	21. Indoor Public Space /	Hospital / Museum / Library				
	22. Gas Station					
	23. Resort					
	24. Lab / Test					
	25. Other					
Please	enter a number from the abo	ve list [ 6]: 6			~	

Figure 10: Site location details

## **Step 3: Retrieving Your License Key**

The system will now prompt you to accept or decline the End User License Agreement (EULA). You must accept the terms of the EULA before the Edge Gateway can retrieve its license key. To retrieve the license key, enter **y**[es] as shown in **Figure 11**. The EG retrieves the license key from the Nomadix license key server, then reboots.

Putty	-	×
Please read the Nomadix End User License Agreement ("Agreement") included with the Nomadix Product. A copy of this Agreement can be found at:		^
https://nomadix.com/download/legal/NomadixEULA/pdf		
The Agreement is a binding agreement between the end user and Nomadix. This Agreement governs the end user's use of this Nomadix Product including its software. By clicking "Yes" below and using this software, you indicate your acceptance of the Agreement.		
I agree to the terms and conditions of the Nomadix End User License Agreement. (Y)ES (N)O Y		
The system will now try to contact the Nomadix License Key Server. Please wait		
Received key from License Key Server.		
If the license key is successfully processed the unit will reboot		
		~

Figure 11: License key retrieval.



NOTE: The date and time the gateway receives a valid license from our server for the first time is considered the Software License Subscription start date.

## Step 4: Configuring the System

Log in to the Edge Gateway and use the graphical Web Management Interface (WMI) to configure the product's features. You have now established a basic configuration for the EG that enables internet connectivity.

For additional information about the available EG features, refer to Chapter 2 of the User Guide specific to your EG. For example:

- To establish various billing and authentication methods, see Defining the AAA Services.
- To establish hotel billing, see Assigning a PMS Service.

#### Step 5: Configuring EG DHCP Server Settings

DHCP Server is enabled by default. To configure the DHCP Server, go to DHCP under the Configuration menu. You can either modify the default DHCP pool, add additional pools or delete the default DHCP pool and create a new pool. The total lease pool size recommendation is 75% more than the number of licensed subscribers. **Table 3** shows the factory default DHCP server settings.

DHCP Parameters	Your Settings	Default Values
DHCP Services (Disable)		no
DHCP Relay (Yes / No)		no
If No, skip to DHCP Server		
DHCP Relay Server IP Address		blank
DHCP Relay Agent IP Address		blank
DHCP Server (Yes / No) Only if the DHCP Relay is disabled		yes
DHCP Server IP Address		10.0.0.4
DHCP Server Subnet Mask		255.255.255.0
DHCP Pool Start IP Address		10.0.0.12
DHCP Pool End IP Address		10.0.0.72
DHCP Lease Minutes		1440

Table 3: DHCP server configuration

#### Sample Network Setup

An example of a basic network including the Edge Gateway is shown in Figure 10.



Figure 10: Example of a network setup



# **Additional Documentation**

Additional Product documentation can be found at: http://www.nomadix.com/technical-support-documentation



Nomadix Product Documentation