

**ROAM ENTERPRISE PRE-DEPLOYMENT SCOPE CHECKLIST**  
(Customer-hosted ROAM Projects where the Customer is Responsible for Installation)

**Project Information**

Customer Name: \_\_\_\_\_  
Project Location: \_\_\_\_\_  
Date: \_\_\_\_\_

**Portal Mapping Database Obligations**

The ROAM Enterprise portal utilizes a street based mapping database provided by Google Maps. The mapping database is accessed through the internet, so it will be the customer's responsibility to maintain access to the internet in order for the mapping to function properly.

**Do you understand your obligations for this service?**       Yes  No

**Group Control**

Group controls will affect the reporting, scheduling and network formation capabilities of ROAM. Scheduling and control functions may not process when lights are connected to group controls. Plus, some malfunctions will not be detected when fixtures are wired behind group controls. Networks will reform based upon node availability, which may limit data transmission for nodes in the vicinity of the group controlled nodes. Therefore, ROAM recommends that all group controls be removed prior to installing ROAM on the fixture.

**Will you have any group lighting controls on your lighting system?**       Yes  No

**Do you want to be alerted of any fixtures that are connected to a group control?**       Yes  No

**System Voltage**

ROAM nodes are designed to operate on most electrical systems. Three different models are available; 120-277 volts, 347 volts or 480 volts. The ROAM gateways are designed to operate on 120, 208, 240 or 277 volts. Operating the equipment on voltages outside of their intended nominal voltage range could damage the equipment.

**What voltages do you utilize for your lighting system?**       120V  208V  240V  277V  347V  480V

Also, lighting systems utilizing different voltages for the photocontrol and fixture, i.e. photocontrol wired 120 volts and the fixture wired 240 volts, will cause the ROAM node to report a wiring issue.

**Do you utilize different voltages for fixtures and photocontrols?**       Yes  No

**Do you want to be alerted on the portal of this wiring scheme?**       Yes  No  Not Applicable

**Decorative Fixtures**

The ROAM nodes will mount in any standard fixture, plus many decorative style fixtures, that have a NEMA locking receptacle. In preparation for the deployment please provide the type of fixture/photocontrol combinations that you have on your system, as ROAM will not be compatible with certain fixture/photocontrol combinations. If you have concerns about specific combinations, please discuss with a ROAM technical service representative.

**What types of fixture/photocontrol combinations are currently installed on your system? (Check all that apply)**

<input type="checkbox"/> External NEMA locking	<input type="checkbox"/> Internal NEMA locking
<input type="checkbox"/> External w/ metal cupola	<input type="checkbox"/> External w/ plastic cupola
<input type="checkbox"/> Button style	<input type="checkbox"/> No photocontrol

**Load Monitoring**

The ROAM nodes are designed to monitor the power consumed by a single fixture and report problems based on the operating characteristics of that type and wattage fixture. Additional loads connected through the photocontrol receptacle could cause ROAM to fail to diagnose or to misdiagnose a problem with a fixture.

**Are there any situations where additional loads are connected to a fixture?**       Yes  No

**Please describe:**

## Server IP Information

The ROAM gateways and activation equipment will need to be programmed to send the data to the appropriate servers. Please list the server names and IP addresses for each server that will be used in the ROAM system. The ROAM System Requirements will define the number of dedicated servers required to handle the total number of planned ROAM devices.

- Dedicated Server #1 – Description \_\_\_\_\_
  - IP Address for Dedicated Server #1: \_\_\_\_\_
- Dedicated Server #2 – Description \_\_\_\_\_
  - IP Address for Dedicated Server #2: \_\_\_\_\_
- Dedicated Server #3 – Description \_\_\_\_\_
  - IP Address for Dedicated Server #3: \_\_\_\_\_
- Dedicated Server #4 – Description \_\_\_\_\_
  - IP Address for Dedicated Server #4: \_\_\_\_\_
- Dedicated Server #5 – Description \_\_\_\_\_
  - IP Address for Dedicated Server #5: \_\_\_\_\_

## Gateway Options

ROAM offers two backhaul methods for gateways; Cellular and Ethernet. If the Ethernet backhaul is chosen, the applicable IP information must be provided. ROAM's cellular gateways are only capable of using AT&T cellular service. If a cellular service other than AT&T is required, then it will be the customer's responsibility to purchase and install a cellular modem. From the cellular modem, an Ethernet cable can be utilized with an Ethernet gateway for backhauling the data. Please refer to the appropriate "Gateway Installation Instructions" for additional information.

**What method will be used to connect the gateways to the internet? Select Cellular or Ethernet, below. If Ethernet is requested, please provide the additional details requested.**

- Cellular
  - Pole mounted gateway with universal mount
  - Articulating bracket can accommodate mounting brackets of 1.0-3.0 inches
  - Cord grip on 6' power lead with NEMA twist-locking power tap
  - Customer will be responsible for maintaining agreement with AT&T to provide cellular service
- Ethernet
  - Building mounted gateway with universal mount
  - Articulating bracket can accommodate mounting brackets of 1.0-3.0 inches or can be installed with anchor bolts (not supplied)
  - 1/2" flex conduit connector with 10' power lead w/o termination

Firewall Settings: ROAM gateways will need to access your servers to transfer data. Settings should allow both TCP and UDP communications through port 20000. Communications are initialized by the gateway. Installations with multiple gateways behind a router will not need to enable port forwarding. This is handled by the routing tables used in the router.

Additionally, ROAM gateways will periodically check their time with an internet time server at 0.pool.ntp.org. The response to this query is returned on Port 123 and should also be opened on the firewall. Alternatively, an internal NTP server can be specified. If so, no external NTP queries will be issued.

- Static IP (Use optional gateway page for projects with multiple gateways)
  - IP Address for the ROAM Gateway: \_\_\_\_\_
  - IP Address for the default gateway (router IP): \_\_\_\_\_
  - Network Mask: \_\_\_\_\_
  - Primary DNS Server: \_\_\_\_\_
  - Secondary DNS Server: \_\_\_\_\_
  - Internal NTP Server (If required): \_\_\_\_\_
- Dynamic IP (DHCP)
  - Internal NTP Server (If required): \_\_\_\_\_
  - Is DHCP router on the 10.1.0.x subnet?  Yes  No

## Activation Process

The activation process consists of entering an asset GPS location, unique ROAM device identification and customer defined asset attributes. This information is usually collected electronically, through the use of a handheld PDA, GPS device and a bar-coded booklet ("Activation Kit"). In some cases, it may be more efficient to manually activate the nodes with the customer providing a database file (ROAM will provide the required format) of the asset locations and attributes.

**Activation Process to be used**

Electronic  Manual

## Remote Access

Prior to beginning the activation process, the installation and set-up of the software is required. In order to insure a more efficient and accurate set-up, ROAM requests the temporary use of a remote access software, similar to Join.Me. Even after the installation, ROAM recommends the continued use of this type of software to allow for remote technical support. Without the use of remote access software, technical support may require fee based on-site support.

**Will you be able to provide remote access to the server?**

Yes  No

## Loaned Activation Equipment

If an Activation Kit is not purchased separately but is provided as part of on-site Project Management Services, Customer may use the Activation Kit during the period of deployment. The Activation Kit must be returned to ROAM promptly following activation of the Products. If the Activation Kit (or portion thereof) is destroyed, damaged, lost or stolen, Customer must, at the option of ROAM, either replace or repair the Activation Kit at Customer's sole cost. Customer acknowledges that the Activation Kit will remain the property of ROAM and ROAM does not transfer any rights in the Activation Kit to Customer.

## Fixtures with Dimming Control

ROAM has the capability of controlling the dimming functionality of LED fixtures, plus some HID and fluorescent fixtures, with the proper equipment. The fixtures must be equipped with a 0-10v input control interface, plus a ROAM dimming control module (DCM). Both of these items are supplied by the fixture manufacturer at the time of purchase. The customer should confirm with the fixture manufacturer that the specific dimming fixture that the customer is planning to use has been pre-approved for use with a ROAM DCM. In addition, ROAM will need to modify the activation process to allow for scanning the barcodes of both the ROAM node and the DCM.

**Does the project include dimmable fixtures?**

Yes  No

## Time Zone Settings

In order to accurately display the hourly data and execute schedules/events, the time zone setting for the deployment area and whether Daylight Savings Time is observed must be provided.

**Time Zone Setting:**  Eastern  Central  Mountain  Pacific  Other \_\_\_\_\_

**DST Observed:**  Yes  No

## Attributes

During installation of the ROAM nodes, attributes for each lighting asset can be entered into the ROAM System. ROAM provides the use of the attributes listed below as options. Please choose the attributes that should be included for this project.

- |  |                                       |  |   |  |
|--|---------------------------------------|--|---|--|
| <input type="checkbox"/> Pole ID                                   | <input type="checkbox"/> Pole Style   | <input type="checkbox"/> Pole Type         | <input type="checkbox"/> Pole Classification  | <input type="checkbox"/> Pole Material   |
| <input type="checkbox"/> Pole Color                                | <input type="checkbox"/> Pole Model   | <input type="checkbox"/> Foundation Type   | <input type="checkbox"/> Mounting Height      | <input type="checkbox"/> Electrical Feed |
| <b>Scannable Attributes:</b> <input type="checkbox"/> Fixture Type | <input type="checkbox"/> Fixture Mfg  | <input type="checkbox"/> Fixture Model     | <input type="checkbox"/> Fixture Install Date | <input type="checkbox"/> Fixture Voltage |
| <input type="checkbox"/> Lamp Type                                 | <input type="checkbox"/> Lamp Wattage | <input type="checkbox"/> Lamp Install Date |   |  |

## Signatures

**The information provided above is accurate and complete to the best of my knowledge.**

**Customer Contact**

**Name:** \_\_\_\_\_ **Date:** \_\_\_\_\_

**Contact Phone Number:** \_\_\_\_\_

**Contact E-mail Address:** \_\_\_\_\_

**Signature:** \_\_\_\_\_

## Network Information For Projects With Multiple Gateways

### Information Required for Each Gateway

Gateway #2 Description (i.e. Location): \_\_\_\_\_

- IP Address for the ROAM Gateway: \_\_\_\_\_
- IP Address for the default gateway (router IP): \_\_\_\_\_
- Network Mask: \_\_\_\_\_
- Primary DNS Server: \_\_\_\_\_
- Secondary DNS Server: \_\_\_\_\_
- Internal NTP Server (If required): \_\_\_\_\_

Gateway #3 Description (i.e. Location): \_\_\_\_\_

- IP Address for the ROAM Gateway: \_\_\_\_\_
- IP Address for the default gateway (router IP): \_\_\_\_\_
- Network Mask: \_\_\_\_\_
- Primary DNS Server: \_\_\_\_\_
- Secondary DNS Server: \_\_\_\_\_
- Internal NTP Server (If required): \_\_\_\_\_

Gateway #4 Description (i.e. Location): \_\_\_\_\_

- IP Address for the ROAM Gateway: \_\_\_\_\_
- IP Address for the default gateway (router IP): \_\_\_\_\_
- Network Mask: \_\_\_\_\_
- Primary DNS Server: \_\_\_\_\_
- Secondary DNS Server: \_\_\_\_\_
- Internal NTP Server (If required): \_\_\_\_\_

Gateway #5 Description (i.e. Location): \_\_\_\_\_

- IP Address for the ROAM Gateway: \_\_\_\_\_
- IP Address for the default gateway (router IP): \_\_\_\_\_
- Network Mask: \_\_\_\_\_
- Primary DNS Server: \_\_\_\_\_
- Secondary DNS Server: \_\_\_\_\_
- Internal NTP Server (If required): \_\_\_\_\_

Gateway #6 Description (i.e. Location): \_\_\_\_\_

- IP Address for the ROAM Gateway: \_\_\_\_\_
- IP Address for the default gateway (router IP): \_\_\_\_\_
- Network Mask: \_\_\_\_\_
- Primary DNS Server: \_\_\_\_\_
- Secondary DNS Server: \_\_\_\_\_
- Internal NTP Server (If required): \_\_\_\_\_