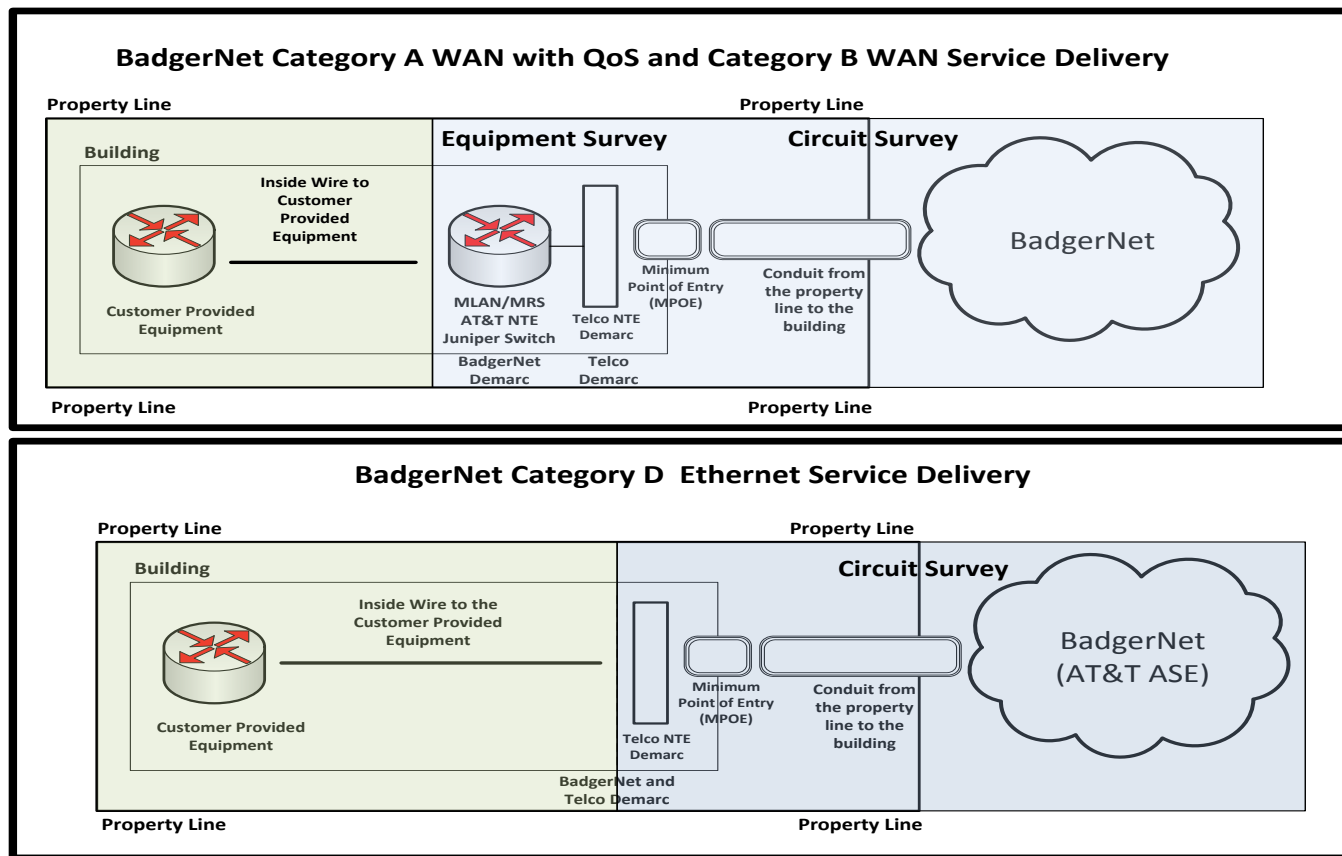




# BadgerNet Service Delivery

Last Updated March 2, 2017

The following describes the high level activities and responsibilities to deliver BadgerNet services to each site.



## Activity: Pre Site Survey for Category A, B and D

**Purpose:** The local telco will determine if there are special fiber construction costs at a site.

The local telco provider will validate their existing infrastructure and determine if the site requires special fiber construction. This remediation has two parts: 1) everything necessary to deliver the service on fiber to the property line, and 2) the fiber and equipment needed to deliver the service to the Minimum Point Of Entry (MPOE) using a customer provided pathway. Examples of a customer provided pathway are conduit, aerial or direct burial. The local Telco is responsible for this special construction.

AT&T will notify DET if any special fiber construction costs are required at a site via a rate letter. DET will forward the rate letter to the customer for review. If the customer approves the costs, the service order will be processed. If declined, the order will be cancelled.

## Activity: Site Surveys

<b>Circuit Survey (local Telco) for Category A, B and D</b>	<b>Equipment Survey (AT&amp;T Juniper Switch - MRS) for Category A and B</b>
<p><b>Purpose:</b> Local telco completes a circuit survey at the site to identify any potential remediation to the building entrance, or the interior Minimum Point of Entry (MPOE) such as backboards, power, cooling and space for the Telco circuit Network Termination Equipment (NTE).</p>	<p><b>Purpose:</b> The AT&amp;T Managed Router Service (MRS) team completes an equipment survey at the site to identify any potential interior remediation required for the Juniper switch equipment. This equipment will be installed in the MPOE physically next to the local Telco circuit NTE device. The location of this Juniper switch may not be where the legacy BCN equipment is installed.</p>

**Circuit Survey (local Telco) for Category A, B and D (continued)**

**Equipment Survey (AT&T Juniper Switch - MRS) for Category A and B (continued)**

**Circuit Survey:** AT&T releases the circuit order to the local Telco provider for the site.

The local Telco will communicate and schedule access with the DET Deployment Engineer for State Agencies or with designated local customer contact for TEACH and Authorized Users. The customer is responsible to confirm or request an alternate date/time for the survey within 3 business days.

Building Entrance: Construction may include new or modifying an existing customer pathway from the property line to the Minimum Point of Entry (MPOE). The customer pathway could be constructed in multiple ways; some examples are conduit, aerial or direct burial.

Interior includes but is not limited to:  
 Fire-rated plywood backboard  
 Power (Electricity)  
 Conduit if applicable  
 Air Conditioning (Temperature) and Ventilation  
 #6 Ground Wire

**Equipment Survey:** AT&T releases the equipment order to the AT&T Managed Router Service (MRS) team for the site. There are two parts to the Juniper Switch survey.

Part 1: The AT&T MRS team will communicate and schedule access with the DET Deployment Engineer for State Agencies or with designated local customer contact for TEACH and Authorized Users. The customer is responsible to confirm or request an alternate date/time for the survey within 5 business days.

Part 2: During the site survey, the local customer technical contact must determine and share with the AT&T MRS technician, the inside wiring specifications for the customer provided cable between the MRS Juniper switch and the customer equipment. The wiring specifications must include: 1) length in feet, 2) type of cable: copper or fiber MM 62.5, MM 50, SM, 3) connector: RJ45, ST, SC, LC and 4) new or reuse existing cable. The MRS technician will record this information in the comments section of the survey results.

Interior includes but is not limited to:  
 Fire-rated plywood backboard  
 Power (Electricity)  
 Conduit, if applicable  
 Air Conditioning (Temperature) and Ventilation

Customer Inside Wiring Specifications:  
 Length  
 Type of cable and connector  
 New or reuse

## Activity: Survey Results

Circuit Survey (local Telco) Results for Category A, B and D	Equipment Survey (AT&T Juniper Switch - MRS) Results for Category A and B
<p><b>Circuit Survey Results:</b>            AT&amp;T will provide the local telco circuit site survey results to the designated deployment contact for each site. Disregard the two auto generated circuit survey result emails from AT&amp;T as the information contained is only partially correct. The DET BadgerNet team will provide each customer with an official remediation report for each telco circuit site visit. Customers are asked to reply to this official remediation email within 5 business days to accept/decline or acknowledge there is no remediation work. If there is remediation, the email will include requirements that need to be completed by the customer as a result of this circuit survey.</p>	<p><b>Juniper Equipment Survey Results (Interior and Customer Inside Wiring):</b>            AT&amp;T will provide the MRS Juniper switch site survey results to the DET BadgerNet team, who will provide each customer with an official remediation report for each Juniper equipment site visit. Customers are asked to respond to this official remediation email within 5 business days to accept/decline or acknowledge there is no remediation work. If there is remediation, the email will include requirements that need to be completed as a result of this MRS Juniper switch equipment survey.</p>
<p><b>Time Frame:</b>            If remediation is required, the customer is responsible to follow their local procurement processes to ensure the work is completed. The customer must notify the BadgerNet team when the remediation is complete. If no status is provided, the DET BadgerNet team will request an update every 10 business days until complete. The BadgerNet team will then notify AT&amp;T to schedule the installation of the local telco circuit.</p> <p>Note: Delays in remediation may result in transformation delays.</p>	<p><b>Time Frame:</b>            If remediation is required for either the Juniper equipment or customer inside wiring, the customer is responsible to follow their local procurement processes to ensure the work is completed. The customer must notify the BadgerNet team when the remediation is complete. If no status is provided, the DET BadgerNet team will request an update every 10 business days until complete. The BadgerNet team will then notify AT&amp;T to schedule the installation of the MRS Juniper switch and site transformation.</p> <p>Note: Delays in remediation may result in transformation delays.</p>

## Activity: Installation

Circuit Installation for Category A, B and D	Equipment (AT&T Juniper Switch - MRS) Installation for Category A and B
<p><b>Circuit Installation:</b>            The local Telco will schedule the circuit installation date and notify the designated deployment contact via email or phone call. The contact is responsible to coordinate onsite access on that date. If onsite access cannot be arranged on that date, the contact must reply to the local telco to avoid unnecessary dispatches.</p> <p>Note: Delays in coordinating onsite access will result in transformation delays.</p>	<p><b>Juniper Switch Equipment Installation:</b>            The AT&amp;T MRS Juniper switch will be installed on the day of customer site transformation/test and turn-up.</p>

## Activity: Transformation

Transformation for Category D	Transformation for Category A and B
<p><b>Transformation for Category D:</b> The circuit is ready for use and billing begins when circuit installation is complete. AT&amp;T will issue a Welcome to BadgerNet email customized for each site. Review the information in the email and reply all within 48 hours if changes are required.</p> <p>The customer is responsible to schedule transformation for each site. The customer will connect the BadgerNet circuit to their local network equipment using their local inside wiring and test. When successful, reply all to the Welcome to BadgerNet email and the DET BadgerNet team will enter a disconnect request for your legacy BCN request. This will stop parallel billing for BCN service after 5 business days.</p>	<p><b>Transformation for Category A and B:</b> The AT&amp;T MRS team will schedule equipment delivery, installation, and test and turn-up with the DET Deployment Engineer for State Agencies or with designated customer contact for TEACH and Authorized Users. The AT&amp;T MRS team require 7 business days minimum lead time to schedule the transformation.</p> <p>Transformation window is 4 hours. An audio bridge will be available. AT&amp;T MRS Technician will bring along and install the MRS Juniper switch. Both devices, local telco circuit NTE and AT&amp;T MRS Juniper switch, are located in the MPOE. The AT&amp;T technician will provide and install the jumper/patch cable between the Juniper switch and the local Telco NTE device. No customer involvement is required.</p> <p style="padding-left: 40px;">AT&amp;T will provide a jumper/patch cable – up to 50 ft. Over 50 ft. will be customer provided inside cabling</p> <p>AT&amp;T MRS Technician will complete non-intrusive local telco circuit test and turn-up. No customer involvement is required.</p> <p>WAN Testing requires either a new or existing inside wiring cable to connect the Juniper switch to customer equipment.</p> <p style="padding-left: 40px;">A new cable should be already connected to the customer equipment and the other end labeled and ready for the AT&amp;T technician to plug into the Juniper switch.</p> <p style="padding-left: 40px;">If reusing an existing cable, a customer will need to be on-site to identify the correct cable for the AT&amp;T technician to plug into the Juniper switch.</p> <p>Customer network technical support staff should participate in the audio bridge if they are not on-site and need to monitor and/or modify customer equipment.</p> <p>AT&amp;T MRS Technician will complete intrusive WAN migration.</p>

<b>Transformation Category D (continued)</b>	<b>Transformation for Category A and B (continued)</b>
	<p>When migration is complete, the on-site customer contact must perform user defined acceptance testing to ensure that BadgerNet service meets their business requirements. User define acceptance testing may include steps such as using an application, sending an email, using the Internet and network printing. Best practice is to test and record the results of your user defined acceptance steps on BCN before transformation to ensure that the results are the same on BadgerNet.</p> <p>AT&amp;T will issue a Welcome to BadgerNet email customized for each site. This email will notify the DET BadgerNet team to enter a disconnect request for your legacy BCN service which will stop billing five (5) business days later. If you would like to keep your BCN service longer than 5 days, please reply all to the email with the future disconnect date within 48 hours. Each site will receive an invoice for both BadgerNet and BCN service a minimum of 5 days. Review all other information in the email and reply all within 48 hours if changes are required.</p>

## Notes

### Fiber:

All BadgerNet circuit orders will be issued on fiber. This includes 6 Mbps of service which are installed on copper in BCN today. The local telco will conduct a fiber circuit survey which may identify remediation that includes construction of building entrance facilities. This information will be in the official remediation email provided by DET. The customer can decline the fiber requirement and request the service be delivered on copper, AT&T will then validate if copper transport is feasible. If yes, the fiber service order will be cancelled and a new copper service order will be placed. The local Telco will communicate and schedule access for a copper circuit survey with the DET Deployment Engineer for State Agencies or with designated local customer contact for TEACH and Authorized Users. The customer is responsible to schedule the copper circuit site survey in a timely fashion. When complete, DET will provide an official copper remediation email.

Customers are asked to reply to the fiber remediation email within 5 business days to accept/decline or acknowledge they intend to proceed with Fiber remediation or decline and want to proceed with investigating if copper is feasible.

### Hot Cut:

If the telco does not have any parallel or new fiber facilities available between telco central offices or the customer property line and a telco central office, the existing BCN telco facilities will be reused. Customers will be notified if a hot cut is needed during the survey phase. A hot cut may increase the amount of time service is unavailable at a site during transformation from BCN to BadgerNet.

### Welcome to BadgerNet Email:

Customer site information to verify and respond within 48 hours: local on-site contact, billing contact  
BadgerNet site specific information: BadgerNet site ID, Customer site ID, Circuit ID, Help Desk contact

### BCN equipment removal:

Legacy BCN equipment will not be removed. Equipment disposal will be addressed at time of decommission.