



## Introduction

Northland's Service Level Agreement (SLA) specifies minimum service levels measured as Service Availability, Network Latency, Packet Loss and Jitter. This SLA applies to Internet and MPLS services delivered over T1, Ethernet, fiber optic facilities and wireless only.

### I. Service Availability for Network Connectivity

Service Availability is defined as a customer's ability to exchange IP packets with Northland's network through network components provided or owned by Northland. Service availability is continuously monitored by logging any connectivity status changes on the customer's router. If there is no connectivity for **10 consecutive minutes**, the service is considered to be in a "network outage" situation. If the outage is a result of a failure of any component on Northland's network or customer premise equipment supplied and managed by Northland, Northland will issue a credit based on the length of the outage, subject to the "Eligible Service Credit" and "Service Credit Process" below. Service outages caused by planned maintenance, unauthorized modification of installed hardware, excessive bandwidth use caused by the customer, failure of telco circuits, power failures or failure of any customer premises equipment obtained from a source other than Northland are not covered by this Service Availability Agreement and are not eligible for compensation. Situations where Northland cannot reach the technical contact and/or arrange access to customer premise for repair may also not be eligible for some or all credit. For Northland products that are not supported 24/7, credits may only apply for outages that occur during business hours.

For any outage that occurs during business hours, (Mon-Fri 8am – 6pm), Northland will provide 1 day of credit for each complete hour of the outage. During non-business hours (nights, weekends and holidays), Northland will provide 1-day credit for any outage lasting more than 1 hour. A maximum of **15 days** of credit may be provided during any single month. One day's credit is based on 1/30th of the monthly service charge.

#### Minimum Service Level Guarantee Metric

The following metric describes the minimum percentage of time each month that network connectivity is guaranteed to be available, subject to exclusions above. Should this target not be met, the customer may be eligible for credit as described above.

<b>Service Level Guarantee</b>	<b>Metric</b>
Network Availability	99.999%



## **II. Service Availability for Cloud Computing Services**

Service availability for cloud servers is defined as Northland's ability to provide a fully functional infrastructure that can support a running operating system based on the specifications (RAM, CPU and Disk) purchased by the customer.

Service availability for cloud storage and cloud backup is defined as Northland's ability to provide storage that is operable and readily available to customers over network connections (such as internet or MPLS connections).

Service availability is continuously monitored by logging the operational status of Northland's cloud infrastructure. If the infrastructure that supports the customer's service is inoperable for 10 consecutive minutes, the service is considered to be in an "outage" situation.

Service outages caused by planned maintenance, issues caused by customer's operating system or software applications, excessive bandwidth use caused by the customer or failure of equipment or network connections at the customer's location are not covered by this Service Availability Agreement and are not eligible for compensation.

Northland will provide 1 day of credit for each complete hour of the outage. A maximum of **15 days** of credit may be provided during any single month. One day's credit is based on 1/30th of the monthly service charge.

## **III. Network Latency Guarantee**

Network Latency refers to the amount of time (Round Trip Time) that it takes for an IP packet to traverse Northland's network backbone. Northland monitors latency at regular intervals and compiles the data into a monthly average. Northland target objective is to maintain the following standard:

<b>Type of Connection</b>	<b>Metric</b>
T1, Ethernet, Optical and licensed point to point wireless	45ms
NorthAir Wireless	80ms

Network Latency Credit: In the event that guaranteed network latency measurements are not met during any one calendar-month period, Northland will provide a credit equivalent to one (1) day of service charges (based on 1/30<sup>th</sup> of the monthly service charge).



#### **IV. Packet Loss**

“Packet Loss” is a measurement of the percentage of packets that are dropped on the Northland network backbone. Northland monitors packet loss at regular intervals and compiles the data into a monthly average. Northland’s target objective is to meet the following standard:

<b>Type of Connection</b>	<b>Metric</b>
T1, Ethernet, Optical and licensed point to point wireless	.05%
NorthAir Wireless	1%

Packet Loss Credit: In the event that guaranteed packet loss measurements are not met during any one calendar-month period, Northland will provide a credit equivalent to one (1) day of service charges (based on 1/30<sup>th</sup> of the monthly service charge), for each day the measurement is not met.

#### **V. Jitter**

“Jitter” is a measurement of packet delay variation between network nodes on the Northland network backbone. Northland monitors jitter at regular intervals using packet tests and compiles the data into a monthly average. Northland’s target objective is to maintain the following standard:

<b>Type of Connection</b>	<b>Metric</b>
T1, Ethernet, Optical and licensed point to point wireless	2ms
NorthAir Wireless	150ms

Jitter Credit: In the event that jitter loss measurement standards are not met during any one calendar-month period, Northland will provide a credit equivalent to one (1) day of service charges (based on 1/30<sup>th</sup> of the monthly service charge), for each day the measurement is not met



## **VI. Mean Time to Restore**

The mean time to restore (MTTR) measurement is the average time between the start of a service impacting issue and the resolution of the issue.

There are two (2) priority levels of Trouble Ticket severity (Critical and Major).

MTTR objectives for each severity level is:

Severity 1 – Critical	Average within 2 hours
Severity 2 – Major	Average within 4 hours

“Severity 1 – Critical” is defined as a complete outage affecting Customer’s Service.

“Severity 2 – Major” is defined as a partial outage or service degradation affecting Customer’s Service.

## **VII. Exclusivity of Remedy**

The credits described herein are customer’s sole remedy for failure to meet any criteria, standard, measurement, goal, or objective set forth in this Service Level Agreement, regardless of cause. In no event shall the cumulative credits for all missed measurements in any month exceed the payments by Customer for recurring charges in that month.

## **VIII. Eligible Service Credits**

Credits are based on Internet or MPLS bandwidth charges only and only apply to the specific circuit or affected service. This excludes credit for any other fees that might be charged to the customer. This includes, but is not limited to, set-up fees, local loop fees, muxing charges, and fees for additional services such as additional IP addresses, support charges, and other services.

## **IX. Service Credit Process:**

### **Filing Period**

Claims for service availability credits must be submitted within 2 weeks of the event. Network Latency, Jitter and Packet Loss claims must be submitted within 30 days after the last day of the month when service levels are not met.

## **Claim Process**

Customer must submit the required information by electronic mail to:

[sla-claims@northlandcom.com](mailto:sla-claims@northlandcom.com)

Northland will acknowledge all claims within two business days and will review all claims within ten business days of receipt. Customer will be informed by electronic mail whether the appropriate service credit claim will be granted or rejected. If rejected, the notification will specify the basis for rejection. Customer has the right to contest any rejection of credit issued by Northland.

## **Required Information**

The claim must include the following information:

- a. Organization name
- b. Administrative Contact's name and contact information
- c. Date and beginning/end time of outage or failed metric
- d. Brief description of the characteristics of the outage or failed metric.

## **Credit Process**

Approved Service Level Guarantee credits will be applied to the Customer's billing during the billing cycle following the claim approval.

## **Policy Change**

Northland reserves the right to change, amend, or revise this policy at any time.

The Northland Network does not include equipment located at Customer's premises whether or not provided by Northland, telephone circuits or networks between a POP and Customer's location, inactive POPs, or any networks, network equipment, or telephone circuits not owned or controlled by Northland.