

Schedule

Managed Services

This Schedule is an attachment to and forms an integral part of Customer's Master Enterprise Customer Agreement (the "Agreement") with Rogers.

1. **Definitions.** Capitalized terms used but not defined herein have the meaning ascribed to them in the Agreement. The following terms, when capitalized, have the following meanings:
 - 1.1 Acceptable Downtime. means any of the following events: Scheduled Maintenance; Emergency Maintenance; Customer's breach of the Agreement; order suspensions due to Customer's credit worthiness; failure of Customer's applications or Customer equipment not within the sole control of Rogers or its subcontractors; any act or omission of Customer or user of the Managed Services authorized by Customer; any event of Force Majeure.
 - 1.2 Colocated Site means the physical Rogers data centre location in which Space for Customer equipment is made available by Rogers, as specified in the attached Product Quotation(s).
 - 1.3 Corporate Support Team. Corporate Support Team means the technical support group at Rogers' responsible for handling all support requests from the Customer for the Services.
 - 1.4 Emergency Maintenance means any urgent maintenance activities performed on the Rogers' infrastructure connected to Space or Customer equipment in order to prevent or address imminent failures affecting Rogers' infrastructure.
 - 1.5 End-user. End-user means any person enabled, through a data connection over the internet, to access, use, purchase, download, or otherwise interact with the Customer's content, which is located on or distributed by means of the Customer Equipment.
 - 1.6 Incident. Incident means an unplanned interruption to a Service or reduction in the quality of a Service that the Customer has enrolled for Managed Network Services.
 - 1.7 Mean Time to Repair (MTTR). MTTR means the average length of time it took to repair or resolve an Incident during a specific month, excluding Acceptable Downtime. MTTR metrics are based solely on the Incident Repair Time statistics collected by the Rogers Trouble Reporting System (TRS). MTTR is calculated with the following formula: Mean Time to Repair = Incident Repair Time in one month (hours) ÷ Number of Incidents in same month.
 - 1.8 Out of Service Condition means a condition whereby there is a Managed Service outage, excluding any Managed Service outage resulting from an Acceptable Downtime.
 - 1.9 Scheduled Maintenance. Scheduled Maintenance means any maintenance activities performed on the infrastructure to which Customer's Services are connected provided that Customer shall be given at least forty-eight (48) hours' advance notice of such maintenance activities. Such activities are typically performed during the standard maintenance window on Tuesdays, Thursdays and Sundays from 12AM to 7AM Eastern Time.
 - 1.10 Space means a designated section of the Colocated Site where space of one or more equipment cabinets (or racks) are set-aside by Rogers for Customer equipment.
2. **Features.** Rogers' Managed Services are available either as Managed Network Services or Managed Server Administration Services (collectively "**Managed Services**" or "**Services**", as applicable), in the types detailed below:
 - 2.1 Managed Network Services:
 - 2.1.1 Managed Router. Managed Router Services involve Rogers managing the Customer's router on its behalf. The Customer does not have access to the router. Managed Router Services include:
 - i) real-time SNMP monitoring;
 - ii) daily back-ups of the router configuration for rapid restoration of the hardware;
 - iii) real-time logging of all router devices to a Rogers log server;
 - iv) reporting of router interface traffic in 5 minute intervals and graphing of results in the Customer portal;
 - v) reporting of interface errors in 60 minute intervals and graphing of results in the Customer portal;
 - vi) reporting of CPU and memory usage in 5 minute intervals and graphing in the Customer portal;
 - vii) performance of router configuration changes as requested by the Customer (2 configuration changes are included per month, after which there is a one-time charge per change, which is currently \$50.00, but is subject to change without notification);
 - viii) OS patching and hotfix;

- ix) monitoring of all up-links for up/down status and incident management as required; and
- x) monitoring of bandwidth thresholds and incident management as required.

2.1.2 **Managed Switch.** Managed Switch Services involve Rogers managing the Customer's switch on its behalf. The Customer does not have access to the switch. Managed Switch Services include:

- i) real-time SNMP monitoring;
- ii) daily back-ups of the switch configuration for rapid restoration of the hardware;
- iii) real-time logging of all switch devices to a Rogers log server;
- iv) reporting of switch interface traffic in 5 minute intervals and graphing of results in the Customer portal;
- v) reporting of interface errors in 60 minute intervals and graphing of results in the Customer portal;
- vi) reporting of CPU and memory usage in 5 minute intervals and graphing in the Customer portal;
- vii) performance of switch configuration changes as requested by the Customer (2 configuration changes are included per month, after which there is a one-time charge per change, which is currently \$50.00, but is subject to change without notification);
- viii) OS patching and hotfix;
- ix) monitoring of all up-links for up/down status and incident management as required; and
- x) monitoring of bandwidth thresholds and incident management as required.

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2.1.3 **Managed Firewall.** Managed Firewall Services include management of Cisco or Fortinet devices. Customer supplies the device. The Customer must have a Cisco Smartnet warranty on any managed Cisco device and Fortinet support and on Fortinet device. Managed Firewall Services include:

- i) management of an existing Customer Cisco or Fortinet firewall;
- ii) 24 x 7 monitoring of availability, concurrent connections, memory usage, device health, and SNMP MIBII variables;
- iii) logging and reporting include 24 x 7 firewall Access Control List (ACL) logging to a syslog server
- iv) access to online maintenance and incident response service via the Customer portal;
- v) firewall software maintenance and updates, as released by the firewall manufacturer;
- vi) 2 firewall rule changes per month, to a maximum of 30 minutes each, after which there is an hourly charge, to be quoted by Rogers.

2.1.3.1 **Managed Firewall Add-on Features.** The following features are available as optional add-ons:

- i) management of Fortinet Unified Threat Management (UTM) solution;
- ii) enhanced reporting available via FortiAnalyzer (additional monthly fees apply).

2.1.4 **Managed Firewall Service - Cloud** Managed Firewall Services for Public Cloud include management of the Fortigate virtual firewall appliance. The virtual device is supplied by Rogers as part of the Public Cloud Services. Managed Firewall Services for Public Cloud include:

- i) management of a Fortigate virtual firewall;
- ii) 24 x 7 monitoring of availability, concurrent connections, memory usage, device health, and SNMP MIBII variables;
- iii) logging and reporting include 24 x 7 firewall Access Control List (ACL) logging to a syslog server
- iv) access to online maintenance and incident response service via the Customer portal;
- v) firewall software maintenance and updates, as released by the firewall manufacturer;
- vi) two (2) firewall rule changes per month, to a maximum of 30 minutes each, after which there is an hourly charge, to be quoted by Rogers.

2.1.4.1 **Managed Firewall Service Add-on Features.** The following features are available as optional add-ons:

- iii) management of Fortinet Unified Threat Management (UTM) solution;
- iv) enhanced reporting available via FortiAnalyzer (additional monthly fees apply).

2.2 Managed Server Administration Services:

- 2.2.1 **Managed Server Administration Tiers.** Managed Server Administration Services are offered in three tiers: Self-Serve Monitoring and Alerting, Proactive Monitoring, Patching and Reporting, and Fully Managed.
- 2.2.2 **Self-Serve Monitoring and Alerting.** This tier of Managed Server Administration Services provide key Customer server component monitoring, threshold alerts and reporting, with extra support available on a pay-per-use basis.
- 2.2.3 **Proactive Monitoring, Patching and Reporting.** This tier of Managed Server Administration Services includes the same features as the Self-Serve Monitoring and Alerting tier, plus scheduled OS patching.
- 2.2.4 **Fully Managed.** This tier of Managed Server Administration includes the same features as the Proactive Monitoring, Patching and Reporting tier, plus onsite support as required at no additional cost. The Fully Managed tier of Managed Server Administration includes Rogers' support of the Customer to make every reasonable effort to solve any Incident. Certain conditions apply, as set out below.

3. Term, Rates, and Charges

- 3.1 The term of each Managed Service (each an "**Initial Service Term**") is as set forth in the Product Quotation(s). The term of this Schedule commences on the date of signature of the Agreement by Customer, or, if this Schedule is attached to the Agreement by way of amendment, then on the date of signature of said amendment by Customer. Upon expiration of the Initial Service Term, Managed Services may be renewed for an additional period set forth in a Product Quotation to be added to this Agreement by way of amendment (a "**Renewal Service Term**") or, if no amendment is executed, the Services will automatically renew on a month-to-month basis (a "**Month-to-Month Renewal Term**"). The Initial Service Term, Renewal Service Term, and Month-to-Month Renewal Term" are collectively referred to as a "**Service Term**".
- 3.2 The Fees for the Managed Services, including the Monthly Recurring Charges and Non-Recurring Charges, are set out in the Product Quotation(s). Professional Service charges are set out in any applicable Statement of Work. Customer is solely responsible in the event of charges arising from fraudulent and/or unauthorized use of Customer equipment, Rogers' equipment or Managed Services by any third party or unauthorized person. In the case of Managed Firewall Services for Public Cloud (as part of the Managed Network Services), the Customer is responsible for all monthly and hourly Public Cloud Services charges in relation to the delivery of the Managed Firewall Services. This includes, but is not limited to, virtual machines, V-racks, IPs, storage, and bandwidth. Unless otherwise specified in the Product Quotation, there are no limits or restrictions on usage.
- 3.3 Monthly Recurring Charges are invoiced monthly, in advance, on the first day of each month. Any applicable Non-Recurring Charges shall be billable as of the date of execution of this Agreement.
- 3.4 Unless otherwise agreed to in writing by Rogers and Customer, Rogers reserves the right to commence billing Customer for the Managed Services on the earlier of thirty (30) days following execution by the Customer of the Agreement related to the Managed Services or thirty (30) days after the Service Effective Date in accordance with this Schedule. Rogers will, by way of invoice or otherwise, notify Customer of the Service Effective Date. In the first month, the charges will be prorated for the number of days in the month after the billing commencement date. Applicable Service Credits will be applied to Customer's invoice within two billing cycles after Rogers approves Customer's request for Service Credits.
- 3.5 Rogers reserves the right to change rates for any and all Managed Services throughout the Service Term upon the provision of ninety (90) days' written notice to Customer in the event of an increase in third party supplier costs.
- 3.6 Upon the commencement of a Month-to-Month Renewal Term for Managed Services, the rates for such Services will be increased by twenty (20%) percent, based on the average of the previous three months of monthly recurring charges.
- 3.7 Customer must pay invoices within thirty (30) days of the date of each Rogers invoice.

4. Services and Equipment.

- 4.1 **Remote Hands.** Rogers will make available personnel ("**Remote Hands**") who will, upon Customer request and availability, provide non-technical support and assistance. Rogers will respond to a reasonable number of

requests based on the size of the installation, and response times will be based on a best-efforts basis. Remote Hands will act only upon request and direction from the Customer. Rogers is not responsible or liable for any consequences of the actions performed upon Customer request by Remote Hands.

4.2 Ownership in Customer Equipment and Content. All interest in and ownership of the Customer Equipment and the content on such Customer Equipment including, but not limited to, those portions of the content that are the Customer's trade names, trademarks or service marks, are and shall remain the property of the Customer, or the registered owner of such Customer Equipment or content, as applicable.

4.3 Customer Equipment Ownership Requirements. Where the Customer has purchased Managed Firewall Services (Managed Network Services) or Fully Managed Server Administration (Managed Server Administration Services), the equipment under management may be owned by Rogers or by the Customer. If the equipment is owned by the Customer, the following conditions must be in place in order for Rogers to perform the appropriate Managed Services:

- i) The Customer Equipment must have an up-to-date warranty or equipment maintenance contract valid for the entirety of the Service Term for appropriate Managed Services;
- ii) The Customer Equipment must have a supported OS with up-to-date patching; and
- iii) The Customer must provide Rogers with physical and remote access to the Customer Equipment.

4.4 Managed Services Restrictions. Rogers is unable to provide Managed Firewall Services (Managed Network Services) or Fully Managed Server Administration (Managed Server Administration Services) in the following circumstances:

- i) Where the equipment vendor deems the equipment unrepairable;
- ii) Where a disaster situation renders the equipment inoperable, unrepairable or unreachable;
- iii) Where the Incident is determined to be caused by a software application issue;
- iv) Where the Incident is determined to be caused by inadequate infrastructure;
- v) Where the Customer elects to opt out of Scheduled Maintenance for a period longer than six (6) consecutive months; and
- vi) Where Customer Equipment does not meet the conditions described in Section 4.3 above.

In any of the above circumstances, Rogers will continue to support the Customer on a best effort basis. Best efforts support includes two (2) hours of Rogers' onsite support during an Incident. Any effort in excess of two (2) hours will be billable to the Customer at the standard pay-per-use rate. Rogers will seek written approval from the Customer prior to commencing such billable support.

5. Security Access and Fraud

5.1 Rogers shall use commercially reasonable efforts to secure Rogers Equipment, excluding unmanaged Equipment provided by Rogers, and Rogers Service platforms. Notwithstanding any action of Rogers, Customer is solely responsible for security of Customer data. Where a situation is considered a security breach, Rogers shall notify Customer as soon as feasible and may act on Customer's behalf if Rogers is unable to get correct approvals from Customer in a timely manner to deal with the situation. However, Rogers shall not be liable for any inability, failure or mistake in doing so, nor any security breach that occurs despite its commercially reasonable efforts. Rogers provides absolutely no guarantees in relation to its efforts to identify security breaches.

5.2 Customer is solely responsible for establishing access and user management controls that clearly identify individuals who have access to Customer Space, account administration, security, technical and/or billing rights ("**Access Control and User Management Controls**") and to communicate same to Rogers. Customer will inform Rogers in a timely manner of any change to Customer Access Control and User Management Controls, and shall be solely liable for any inconvenience, delay or damage that may result from any failure by Customer to do so. The Access Control and User Management Controls will be such that the individuals being authorized to access as well as those authorized to perform any changes to Customer Access Control and User Management Controls use appropriate secure credentials such as secure usernames and passwords, which credentials must utilize strong security traits. Customer is solely responsible for credentials and must keep credentials secure and confidential.

5.3 Rogers will track all access to Customer's Managed Services through an online ticketing system and ensure that those who requested access have all necessary documented Customer approvals prior to accessing Customer's Managed Services.

5.4 Customer agrees to fully co-operate and assist Rogers in a timely manner with any investigation or action taken in relation to Rogers' operations and/or provisioning of Managed Services, confirmation of Customer compliance with the Agreement, and/ or breach of the Agreement by Customer.

5.5 In the event of any emergency that presents a risk of an Out of Service Condition, or damage to Customer or Rogers equipment or data belonging to Rogers, a third party, the Colocated Site, or to any persons or property present therein, Rogers may rearrange Customer equipment as is reasonably necessary to respond to the emergency. Additionally, and only as necessary, Rogers may disconnect or remove Customer equipment if the emergency requires such disconnection or removal to avoid damage. Rogers shall use commercially reasonable efforts to notify Customer prior to rearranging, disconnecting or removing Customer equipment, and in any case will notify Customer thereafter.

6. **Service Level Agreement ("SLA")**

6.1 If Rogers fails to meet the applicable service levels outlined in this Section, subject to the conditions set forth therein, Customer shall be entitled to a service level credit ("Service Credit").

Table 1: Managed Services Incident Reporting

Service	Incident Reporting	Service Level Credit
Proactive Monitoring or Fully Managed tier of the Managed Server Administration Services; or Managed Router, Managed Switch, Managed Firewall or OfficeLink Secure type of Managed Network Services	Notify Customer within thirty (30) minutes after Rogers determines that a Customer component on which Managed Services is provided has experienced an issue, excluding Acceptable Downtime. The particular Managed Service tier purchased will dictate the method of reporting.	Upon the Customer's written request and Rogers' confirmation that the Managed Services Incident Reporting SLA was not met, the Customer's account shall be credited for one (1) day of pro-rated monthly recurring charges for the Managed Services for each instance the Managed Services Incident Reporting SLA was not met for reasons other than Acceptable Downtime, provided that only one such Managed Services Incident Reporting Service Credit can be applied for any one calendar day, despite the number of Managed Services Incident Reports missed on that calendar day.

6.2 Incident Validation and Reporting Process (Table 1). Customer must complete a Customer Information Form in its entirety and submits such form to Rogers at myaccount.datacentres.rogers.com. Customer is solely responsible for providing Rogers accurate and current contact information for Customer's designated points of contact. Rogers will be relieved of its obligations under the Managed Services Incident Reporting SLA if the Customer's contact information is out of date or inaccurate due to Customer's action or omission.

TABLE 2: Mean Time to Repair (MTTR) Commitment

Service	Monthly MTTR	Service Credit
Managed Router or Managed Switch or Managed Network Services; or Fully Managed tier of Managed Server Administration Services	< 8 h	The MTTR commitment specifically pertains to the interval between when an Incident has been identified and when Rogers has either notified the Customer that the Incident has been resolved or has proposed a workaround to the Incident to the Customer, excluding Acceptable Downtime and Managed Services Restrictions as described in Section 4.4 above. Upon Rogers' verification that the MTTR over a given billing month was longer than the MTTR commitment, Rogers will issue a Service Credit to the Customer representing 50% of the monthly recurring charges for the Managed Services.

- 6.3 MTTR Validation and Reporting Process (Table 2). Customer must request each month's measurements from its Rogers sales representative by the fifteenth (15th) day of the following month. Rogers Trouble Reporting System (TRS) data will be used to determine MTTR metrics and Customer's eligibility for a Service Credit.
- 6.4 The combined cumulative total of all Service Credits for a calendar month for the Managed Services will not exceed the total Monthly Recurring Charges for the affected Managed Services Sites that Rogers has invoiced for such calendar month.
- 6.5 Notwithstanding the limitation of liability clause in the Agreement, the remedies set out herein are Customer's sole and exclusive remedy for any failure or interruption in the Managed Services. Customer shall not be eligible to seek more than one (1) Service Credit per Out of Service Condition for any given reason within a single calendar month. In the event an Out of Service Condition spans more than one (1) calendar month, the Out of Service Condition shall be defined as one (1) Out of Service Condition for the purpose of the Service Credit that Customer will be entitled to as outlined within this SLA.

7 Termination Fees.

7.1 If Customer terminates the Services without cause, or if Rogers terminates the Services for cause, Customer shall pay to Rogers, as liquidated damages and not as a penalty, an amount which is equal to the sum of:

- i) One hundred (100%) percent of the average monthly charges per terminated Service (as determined over the previous three (3) months, or if less than three months have passed, the average monthly charges of the Service Term per terminated Service) multiplied by the number of months remaining in the Initial Service Term or Renewal Service Term, as applicable, from the effective date of termination;
- ii) any cost which Rogers must continue to pay to third parties for the remainder of the Initial Service Term or Renewal Service Term, as applicable, as a result of the early termination of the applicable Service that exceeds the amount set out in (a) above; and
- iii) a lump sum representing the amortized remainder of any waived or discounted installation or one-time charges associated with the terminated Service in consideration of Customer's commitment to the Initial Service Term or Renewal Service Term, as applicable, for such Service.

7.2 Where Customer terminates the Managed Services prior to the expiration of the Initial Service Term or Renewal Service Term, as applicable, Customer shall either return all Rogers Equipment associated with the Managed Services to Rogers or pay to Rogers the fair market value of such Rogers Equipment.

7.3 The above shall be included in an invoice to Customer subsequent to termination.

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