M2M (Machine-to-Machine) Management Centre

Description

General M2M Overview

Machine-to-Machine (M2M) in general refers to communication in which the end-points are devices, not people. The network can be wireless or wireline, and use one-way or two-way communication. M2M consists of using a device (e.g. sensor, metre, etc.) to capture an “event” (e.g. temperature, inventory level, location, environmental status, etc.), relayed through a network to an application, translating the event into meaningful information by an application (i.e. vending machine is empty, tank level is low, etc.).

Service Description

SaskTel M2M Management Centre

The SaskTel M2M Management Centre is a self-serve web application portal. The M2M Management Centre allows Customers to install, manage and control Subscriber Identity Modules (SIMs) provided by SaskTel for their wireless data devices. Functionality includes near real-time access to monitor operational status, support management and access statistics.

Access to the SaskTel M2M Management Centre is provided through the Customer’s mySaskTel account, and provides the following:

- SIM Management (e.g.)
  - Activate/deactivate SIM pricing plans (subscriptions)
  - Pause/terminate SIM pricing plans (subscriptions)
  - Change SIM pricing plans (subscriptions)
  - Data pooling
  - Order SIMs
  - View service contracts/product offerings and pricing plans (subscriptions)

- Reports and Statistics (e.g.)
  - Downloadable monthly reports
  - View detailed billing information

- Manage Account Profile (e.g.)
  - Change password
  - View contact information
M2M (Machine-to-Machine) Management Centre – continued

Subscriber Identity Modules (SIMs)

A SIM card will be used in a data device (e.g. a wireless modem, module, etc.). M2M accesses provisioned through the SaskTel M2M Management Centre are meant to be used to establish wireless connections between data devices in M2M solution environments. The Rugged SIM Cards for use with the SaskTel M2M Management Centre are available in “standard” and “micro” form factors.

Customers have two (2) delivery options when ordering SIM cards: deactivated or “test ready” mode.

SIM cards ordered in test ready mode must be switched to an active state within six (6) months from the date of shipment.

SIM cards that have not been activated within such six (6) month period will, beginning on the expiration of such period, be deemed to be activated and will be subject to all applicable charges.

SIM cards ordered in a deactivated state must be switched to an active state by the customer using the SaskTel M2M Management Centre in order to connect to the network.

SIM cards are ordered on the SaskTel M2M SIM Management Centre in multiples of ten (10), and additional shipping charges apply.

Devices

For a device to work on SaskTel’s network, the following minimum criteria must be met:

- Device must work on SaskTel’s supported HSPA frequency bands
- Device must have national and industry certification from:
  o PTCRB (PCS Test and Certification Review Board)
  o ISED (Innovation, Science and Economic Development Canada)
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Wireless Access Options

<table>
<thead>
<tr>
<th>Option</th>
<th>Description</th>
</tr>
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<tbody>
<tr>
<td>Base M2M Service</td>
<td>The base M2M Service architecture leverages the SaskTel mobile network and public internet for transport of non-sensitive data from M2M terminals. Device addresses are assigned dynamically. Data communications is one-way from the devices to the internet (i.e. exchange of data traffic must be initiated by the M2M terminal).</td>
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<tr>
<td>M2M Service with Public IP Addressing</td>
<td>If customers require two-way communication with M2M terminals, Public IP Addressing provides a static IP address that has direct access to the internet.</td>
</tr>
<tr>
<td>M2M Service with IPSec VPN</td>
<td>For applications where the M2M data is of a sensitive nature, or the devices need to communicate with internal endpoints located within the Customer's private network, the connection between the M2M terminal and Customer network can be encrypted through the use of an IPSec VPN riding over the public internet connection.</td>
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<tr>
<td>M2M Service with Connection to LANspan™ IP (Note 1)</td>
<td>For applications requiring highly reliable communications, where delivery of the M2M data in a consistent and reliable manner is critical enough to warrant a dedicated connection between the terminal and customer network, a private, dedicated, point-to-point connection (e.g. LANspan IP) can be created between the mobile M2M environment and the customer’s network.</td>
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<tr>
<td>Fully Customized M2M Implementation</td>
<td>For applications with special requirements which do not directly fit into the above models, a professional services design engagement can be used to assist the Customer in determining the ideal network architecture and customized solution to meet their specific requirement set. This option requires a Professional Services Design engagement and is subject to additional charges.</td>
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Note 1: This option requires a Professional Services Design engagement and is subject to additional charges.
M2M (Machine-to-Machine) Management Centre – continued

Additional Features and Functionality

Data Pooling
Data pooling is when each device within a Customer’s network has its own data plan but can share the total amount of data with all the devices on the same plan. All current SaskTel M2M Wireless Price Plans are data pooled.

Roaming
The SaskTel M2M solution allows devices to communicate using the SaskTel 4G wireless network. 4G devices may be used in Canada where SaskTel has partnered with compatible network providers.

Short Message Service (SMS)
SMS Message Origination
SMS Message Origination refers to the ability for an M2M terminal device to initiate a text message at any time.

SMS Message Termination
SMS Message Termination refers to the ability for an M2M terminal device to receive text messages.

Data Pooling and roaming within Canada are included in the charges for SaskTel Management Centre and M2M Wireless Access (the “Service”). Additional charges apply for SMS Origination and Termination features and functionality.

SaskTel provides access to the Service for the Customer in accordance with the terms and conditions contained in the Contract.

If data usage in any month for a SIM activated by the Customer exceeds the data specified in a Service plan the Customer has chosen for that particular SIM, and also exceeds the data within the associated pooled data plans, then excess usage charges will apply.

Device Certification

Overview

SaskTel will offer two categories of Device Certification:

- Technical Approval
- Technical Assessment
M2M (Machine-to-Machine) Management Centre – continued

Service Description

SaskTel Technical Approval includes:

- Simple validation of the device, based on verifying basic device and/or product functionality. Will also examine device/product impacts to SaskTel’s mobile data network.
- SaskTel will perform and confirm the following:
  - that the device can authenticate to SaskTel’s M2M platform using a SaskTel M2M SIM
  - that the device can achieve satisfactory connectivity to the mobile data network, based upon device capabilities (i.e. device category)
- SaskTel will provide Technical Support with regards to SaskTel network functionality.
- SaskTel will provide device/module specific support for the approved device/module.
- Based on review of documentation and physical testing, SaskTel confirms that this device will operate properly on the SaskTel network, notwithstanding the specific applications that may use this device.

SaskTel Technical Assessment includes:

- Simple validation that the device should function on SaskTel’s mobile data network, based on information within the Product Specification Sheets.
- SaskTel will confirm the following:
  - Technology used by device (i.e. HSPA)
  - HSPA frequency bands supported by the device
- SaskTel will provide Technical Support with regards to SaskTel network functionality.
- Device/module specific support for the M2M application provider will come directly from the device and/or distribution manufacturers and not from SaskTel.
- Based on review of documentation, SaskTel confirms that this device should operate on the SaskTel network.
M2M (Machine-to-Machine) Management Centre – continued

Features and Benefits

1. Technical Approval

Customer’s device is tested on site by SaskTel engineers in conjunction with the M2M Management Centre and the SaskTel network.

Technically approved devices are supported by SaskTel through the Original Equipment Manufacturers. End users can report device troubles to SaskTel instead of having to call the Original Equipment Manufacturer.

Original Equipment Manufacturers can advertise that their device has been technically approved by SaskTel.

2. Technical Assessment

Ensure that the customer’s device is compatible with the SaskTel network and the SaskTel M2M Management Centre before deploying on a large scale.

M2M Test Kit

M2M Test Kits are a pre-defined package of M2M tools that allow application and solution developers to gain quick access to the SaskTel M2M Management Centre and cellular network in order to develop or test M2M solutions.

Terms and Conditions

1. Customers must have a SaskTel Wireless Account in place, for monthly billing of M2M cellular service.
2. Standard M2M rate plans will be available and provisioned on the SIM Management Platform, not in SaskTel’s billing systems.
3. Customers must have a prime contact to manage their solution and be the single point of contact for SaskTel.
4. Customers will provide Tier 1 Support for their end customers/users of the application/solution that is provided by them.
5. Customers must use the platform (self-serve) to manage their own SIMs.
M2M (Machine-to-Machine) Management Centre – continued

SaskTel M2M Management Centre & M2M Wireless Service Terms & Conditions

1. DEFAULT

SaskTel shall have the right to suspend Customer's access to the Service to all Users upon thirty (30) days prior notice to the Customer. The decision to suspend access to the Service is at SaskTel’s complete discretion. If SaskTel has suspended access to the Service and Customer cures the default to SaskTel’s satisfaction and SaskTel restores access to the Service Customer's administrator, Customer shall pay reconnect charges if any, as determined by SaskTel and Customer shall be solely responsible for re-establishing access to the Service for all Users. During any period of suspension of the Customer’s access to the Service, Customer shall pay to SaskTel a fee of one dollar ($1) per SIM per month for all of Customer’s SIMs associated with the Customer’s subscription to the Service.

2. CUSTOMER PRIVACY

SaskTel also protects Customer’s personal information in accordance with the SaskTel Customer Privacy Policy.

Customer consents to the sharing of account and profile information held about Customer by SaskTel with other SaskTel companies to help SaskTel better identify Customer’s communication and entertainment needs, and to provide Customer with relevant information, advice and solutions.

Customer also consents to (i) SaskTel collecting information about Customer’s credit history from another SaskTel company or a credit reporting agency, and maintaining and using information about Customer’s credit history, to activate Customer’s Service and assist in collecting amounts owed by Customer, and disclosing Customer’s SaskTel credit history to other credit grantors and credit reporting agencies, and (ii) if Customer is a customer of another of the SaskTel companies, to receiving one bill for the Service and the services of the other SaskTel companies if and when such billing consolidation is available.
M2M (Machine-to-Machine) Management Centre – continued

SaskTel M2M Management Centre & M2M Wireless Service Terms & Conditions – continued

3. NOTICES

SaskTel may use e-mail, text messages, telemarketing, phone, direct mail, voice mail or any other method which provides reasonable notice to Customer, to send Customer notices and changes under these terms and to inform Customer about products and services from SaskTel and related SaskTel companies that SaskTel thinks will interest Customer. Customer agrees to give SaskTel prompt notice of any change of name, address or telephone number.

4. ROAMING

If Customer roams on any other wireless carrier’s network, Customer:

a) Understands and agrees that it has no contractual relationship with the carrier whose network Customer is roaming on, and that Customer is not a third party beneficiary of any agreement between SaskTel and such carrier. Customer understands that the carrier has no obligation of any kind to Customer, and is not responsible for any problems Customer might experience while roaming on their network;

b) Agrees that since the carrier upon whose network Customer is roaming has no responsibility to Customer, Customer cannot make any kind of claim against them, its officers, employees and agents, including without limitation claims for libel, slander, infringement of copyright, or personal injury or death arising in any way directly or indirectly in connection with these terms. This commitment survives the cancellation of these terms; and

c) Understands and agrees that the services of the carrier upon which Customer roams are provided on an as is/as available basis and the carrier does not guarantee or warranty the performance, availability, coverage, uninterrupted use, security or operation of such services.

By using such other carrier systems, you agree to the provisions in subsections (a) to (c) of this Section. The services available for Customer’s use while roaming on any other wireless carrier system are dependent on the services made available by any such other carrier on their network and the specific terms of the roaming agreement in place between SaskTel and any such carrier.
SaskTel M2M Management Centre - Terms of Use

You understand and agree that your use of the SaskTel M2M Management Centre (the “Service”) is your acceptance of and agreement to the terms of this User Agreement. If you do not agree to such terms, then you should not use this Management Centre.

Changes to this Agreement

SaskTel reserves the right to make changes to the SaskTel M2M Management Centre and this User Agreement from time to time, as well as to discontinue the Service or a portion or attribute thereof offered through this Management Centre. SaskTel will communicate changes to this Management Centre, the Services it offers and/or to this User Agreement at M2M Wireless Terms of Service. (www.sasktel.com/m2mterms). You consent to SaskTel notifying you of any such changes (including terms of this User Agreement) by email. If a change to this Management Centre, the service it offers or any feature thereof, or to this User Agreement is unacceptable to you, you may discontinue your use of the Service. Your use of the Service after any such change, means you have accepted and agreed to such change.

Access

The Service is only available to users who have registered for use. You agree that access to the Service is being provided solely in the Province of Saskatchewan, Canada, regardless of what geographic location you access this Management Centre from. You agree that the information you supply during the registration process is accurate and complete and you will update that information if it changes. You are responsible for any and all persons that use your access to the Service.

Personal Information

You represent to SaskTel that you have all consents and permissions that are required by applicable privacy law to provide to SaskTel any and all personal information that you provide as part of registration for access to this Management Centre and that may be used in conjunction with providing the Service to you.
Ownership

The SaskTel M2M Management Centre and the data accessed through it is the property of SaskTel. If you have been provided a user name and a password by SaskTel you are granted a limited, non-sub-licensable right to access the Service and the data provided through it for your informational purposes only. You agree to keep your user credentials confidential and not to share them with any third party. This license is limited to your organization only. Any other party or entity or person must subscribe for separate access to the Service. You may not sell, lease, share, transfer, or sublicense your Service access, the access codes assigned to you or the data accessed through the Service to any third party, whether for direct commercial or monetary gain or otherwise, without SaskTel prior written permission.

Use of the Service

You may not use the Service in any manner or for any purpose that violates any law or regulation, any right of any person, including, but not limited to, intellectual property rights, rights of privacy, or rights of personality, in any manner that is harmful to SaskTel or in any manner inconsistent with this User Agreement. You may not otherwise reproduce, modify, distribute, decompile, disassemble or reverse engineer any portion of the Service or any data provided by SaskTel or which you can access on the Service or create any derivative works from the Service.

“Machine to Machine Service or M2M” means services characterized by the exchange, using machine to machine transceivers, of data and, in some instances, voice and SMS, in a fully or partially automated way, only between devices dedicated or repurposed to a specific application and, in some instances between devices dedicated or repurposed to a specific application and humans for a specific application. For clarity, (1) making or receiving wireless calls or delivering wireless data where the origin or destination of the calls and data are not selected or dictated by a specific application but by a human, either directly or indirectly, by accessing a directory server or browsing capabilities, and (2) general access to the Internet or electronic communications where such access does not otherwise meet the definition of Machine to Machine Service above, whether permanent or temporary, shall not be considered Machine to Machine Service and are not permitted for use as part of this service.

Service Limits

You acknowledge and agree that SaskTel may impose or adjust the limit on the number of requests and transactions you may send or receive through the Service, at any time, in SaskTel's discretion.
M2M (Machine-to-Machine) Management Centre — continued

SaskTel M2M Management Centre - Terms of Use — continued

Data

You may not present data accessed through the Service so that it appears to be available from a third party.

Term and Termination

Your right to use the Service is on a month to month basis and may be terminated by you at anytime upon notice to SaskTel. SaskTel may immediately suspend or terminate your use of the Service without notice to you, if you fail to comply with this Agreement and/or any SaskTel policies that apply to use of the Service.

No Warranty

The SaskTel M2M Management Centre, and the data accessed through it, are provided on an “as is” basis without warranties of any kind, either express or implied. You expressly agree that your use of the Service, including all data distributed, downloaded or accessed through the Service is at your sole risk. SaskTel does not represent or warrant that materials accessed through this Management Centre are accurate, complete, reliable, current or error-free.

Limitation of Liability

Under no circumstances will SaskTel be liable to you or any third party for any direct or indirect, incidental, special or consequential damages, expenses, costs, or losses, whatsoever (including, lost profits, lost revenue, loss of data, loss of use of any information system, failure to realize expected savings or any other commercial or economic loss), whether arising in negligence, tort, statute, equity, contract, common law, or any other cause of action or legal theory and even if SaskTel has been advised of the possibility of such losses or damages. You agree, acknowledge and confirm that the limitations of liability set out in this Section are fair and reasonable in the commercial circumstances of the Service and that SaskTel would not have entered into this Agreement but for your agreement to limit the liability of SaskTel in the manner, and to the extent, provided for. SaskTel assumes no liability arising from your use of the Service in combination with any service, products, equipment or application provided by any third party other than SaskTel.

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M2M (Machine-to-Machine) Management Centre – continued

SaskTel M2M Management Centre - Terms of Use – continued

Waiver

You agree that any claim or dispute you may have relating to or arising out of this Agreement, the Service or the relationship that results from this Agreement or the Service and/or any oral or written statements relating to these terms or the Service, will be conducted individually and you will not commence or participate in any proceedings under class action proceedings legislation against SaskTel and you waive and abandon any right to do so as a condition of receiving the Service.

Severability

If any provision in these terms is determined to be void, invalid or otherwise unenforceable, such determination shall not affect the remainder of this User Agreement.

Governing Law

This User Agreement is governed exclusively by the law of the Province of Saskatchewan and the laws of Canada applicable in Saskatchewan without giving effect to Saskatchewan conflict of law principles. You submit exclusively to the courts of Saskatchewan regarding all matters related to this User Agreement.

Entire Agreement

This User Agreement and any policy or document referenced in this Agreement or available at any site for which a link has been provided in this User Agreement, constitutes the entire Agreement between SaskTel and you regarding your access to and use of the Service.

Rates

M2M Wireless Access Price Plans are highly competitive and subject to change. Please contact SaskTel for current rates.