

## SYSTEMS MANAGEMENT IN THE CLOUD

Tap In Systems' Cloud Management Service (CMS) gives you control over today's heterogeneous and virtual IT infrastructures. Hosted in the cloud, CMS monitors both cloud and on-premises systems, providing status and performance data, alerts and reporting to keep your applications running smoothly.

### A COMPLETE SOLUTION

Tap In's Cloud Management Service (CMS) is a low-cost systems management solution for managing your cloud and on-premises infrastructure. Built on an event management architecture in the Amazon cloud, the service accommodates growing, merging, consolidating and otherwise dynamic IT environments.

Key features include:

- + Real-time monitoring and alerting of system status, usage and performance of cloud and on-premises systems and applications
- + Reporting and charting of historical events and performance metrics
- + Configurable alerts
- + Flexible event status and report viewers available via desktop client, widgets, and Web
- + Fast implementation, with no hardware required and minimal configuration

### PAY FOR WHAT YOU USE

The Tap In Cloud Management Service is an on-demand service – you pay for what you use, and you can turn it on or off at any time. You must be an Amazon Web Services (AWS) customer to use the service, as it is delivered as a "paid Amazon Machine Image (AMI)".

Once you start the Tap In Cloud Management Service, you will be billed for each instance hour in the same way that Amazon bills for AWS.

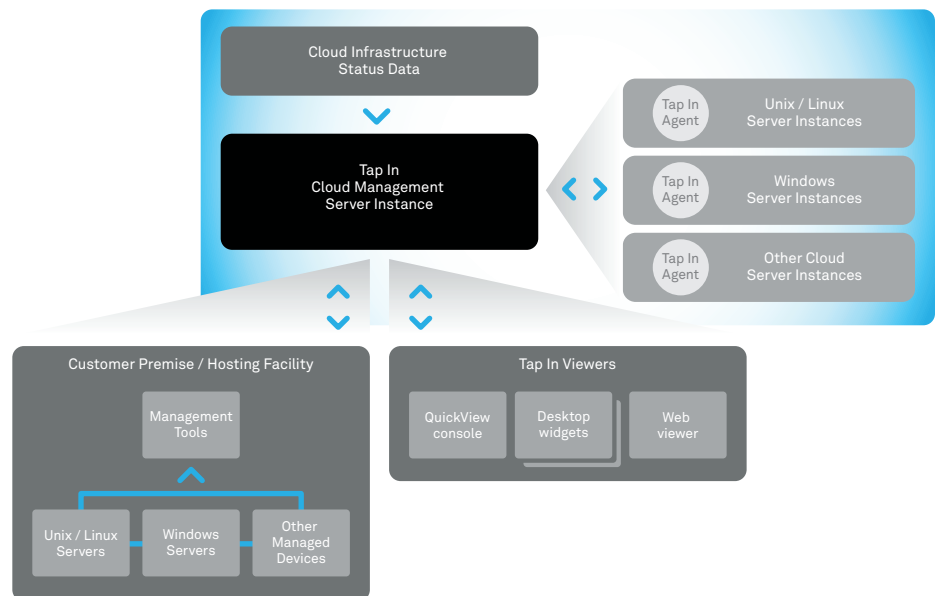
### FOR DIVERSE IT ENVIRONMENTS

Tap In System's Cloud Management Service can accommodate diverse and dynamic environments – Unix/Linux, Windows, cloud-based, locally hosted, and heterogeneous combinations.

### MONITORING CLOUD APPLICATIONS

Amazon and other cloud infrastructure vendors offer scant visibility into dynamic cloud parameters, such as changing host names or instance IDs.

The Tap In Management Server interacts with cloud vendor APIs to enrich monitoring information, enabling Tap In customers to dynamically monitor the health of changing cloud configurations.



For customers with existing systems management or monitoring tools, Tap In integrates with popular tools such as Nagios, Big Brother, Cacti, Windows Powershell, and Microsoft Operations Manager.

Integration with Amazon Web Services is available now, with support for additional cloud platforms coming soon.

## INCREASED CONTROL OVER CLOUD APPLICATIONS

Cloud infrastructure vendors provide cost-effective, scalable computing and storage capacity, but offer limited visibility into the status and performance of cloud-based systems and applications. IT managers are realizing they need more control over their cloud-based applications.

### MANAGED TECHNOLOGIES

Tap In Systems' Cloud Management Service monitors a wide variety of server, network and application technologies:

#### Linux/Unix systems

Tap In's Linux/Unix agent, written in Perl, gathers a wide range of data from Linux/Unix systems. Plugins supported by Nagios can be called by this agent, including those from the open source Nagios Plugin Project. Users can also write scripts to gather additional Linux/Unix system and application information.

#### Windows systems

Tap In's Powershell Agent gathers data from Windows systems. Powershell interfaces with Microsoft applications such as Operations Manager (or Systems Center Operations Manager), Exchange, and standard Microsoft components such as Active Directory, Event Logs, and application .COM or .NET objects. Alternatively, Tap In can use an ActiveState Perl agent to gather Microsoft system data.

#### Network devices

To monitor network devices, Tap In supports use of the Nagios SNMP query plugins to access MIB-based data.

#### Load balancers

Tap In provides users with statistics, alerts and performance metrics of load balancers such as HA Proxy. Users can access Tap In's load balancer data from Tap In's QuickView, Web and Widget viewers.

#### Web applications and Internet services

To provide over-the-Internet monitoring, users can execute scripts from the Tap In Management Server instance in the cloud. This enables monitoring of sophisticated Web services or transactions. Tap In supports common protocols such as HTTP/HTTPS, DNS, SMTP/POP and Web services.

#### Java applications

For Java applications, Tap In Systems' LOG4J mediator translates selected messages to events in the Tap In Management Server.

### EVENT MANAGEMENT ARCHITECTURE

Tap In's event management architecture integrates monitoring data from a variety of sources and technologies. Events are placed on an in-memory publish/subscribe bus, enabling a high throughput of events to be processed. Compared to state-oriented monitoring systems, configuration is simplified, making the Tap In architecture ideal for monitoring dynamic cloud applications.

The service, including its event engine, configuration and reporting components, operates as an Amazon Elastic Compute Cloud (EC2) instance. Scripts can be initiated on the Tap In Management Server to perform over-the-Internet monitoring services. Agents deployed on cloud servers combine server metrics with cloud metadata to create cloud server events on the Tap In Management Server. Agents deployed on internal (on-premises) systems can send events over a secure channel to the Tap In Management Server in the cloud.

### EVENT AND REPORT VIEWERS

Tap In accommodates IT managers' diverse needs for viewing and analyzing systems management and monitoring data:

**QuickView console:** for viewing real-time events as they occur

**Web viewer:** for viewing historical data and generating reports

**Desktop widgets:** for viewing isolated real-time data of special interest

### FAST AND EASY DEPLOYMENT

Tap In's cloud implementation enables customers to deploy their monitoring service quickly and easily. Once agents are deployed, they communicate with the cloud and events are available for viewing. As customers' business requirements change, they can increase capacity simply by adding monitoring instances. Customers can also scale back instances at any time, reducing monthly service costs.

### ABOUT TAP IN SYSTEMS

Tap In Systems is based in San Francisco, California. For more information or to set up a demo, please contact us at [info@tapinsystems.com](mailto:info@tapinsystems.com).