CISCO Kinetic
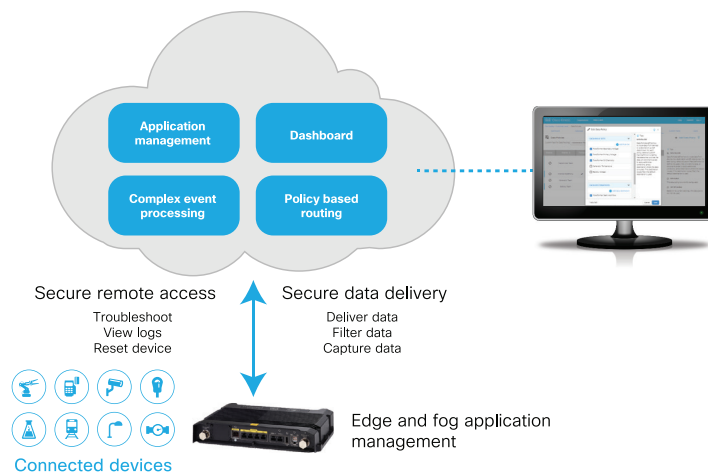
Get the right data to the right applications in the cloud to drive better business outcomes

Amplify the value of your IoT data with the Cisco Kinetic **Data Control Module (DCM)**. As an integral part of the Cisco Kinetic platform, DCM enables you to unlock data from your diverse and geographically-disbursed IoT devices and securely move it to your cloud-based applications. You maintain full control over your data and where it goes.

Application management

Dashboard

Complex event processing

Policy based routing

Secure remote access
Troubleshoot
View logs
Reset device

Secure data delivery
Deliver data
Filter data
Capture data

Edge and fog application management

Connected devices

Gain total control over all your IoT device data to increase efficiency and lower costs

Unlock the value of your IoT data with Cisco Kinetic

The Cisco Kinetic platform is an IoT data fabric, designed to extract data from your connected devices, compute anywhere in a distributed network, and move data to the various applications where it can be used to drive meaningful business outcomes.

The three key modules of the Cisco Kinetic platform

Gateway Management Module (GMM) — to provision, monitor, and manage gateways at scale

Edge & Fog Processing Module (EFM) — to enable computing on distributed nodes of the network

Data Control Module (DCM) — to enforce policy and get the right data to the right apps at the right time

Quickly and easily extract data from your devices

Simplify implementation and management of edge/fog applications using DCM's centralized, cloud-based application lifecycle management tools. You can create, deploy, upgrade, and maintain applications across all your devices. With easy-to-use tools, you can reduce edge/fog app development time and easily maintain apps without any in-depth training.

Streamline data delivery across complex IoT deployments

Apply routing policies and rules to easily move IoT device data to cloud applications across multi-cloud and multi-location deployments, while executing policies to enforce data ownership. The intuitive, cloud-based user interface makes it easy. Create policies that make data available to different applications depending on device type or by using the rules engine to set custom rules. DCM is cloud-neutral, so you aren't restricted to sending data to any single cloud provider.

Create policy-based rules to control how you manage and move device data across your IoT deployment

Eliminate truck rolls with secure remote access

Get secure, remote access to your IoT devices so you can triage and troubleshoot issues, view and download device logs, and reset device state via the edge/fog application. You'll avoid costly truck rolls and accelerate time to resolution.

Set rules for systematic data movement

Define custom rules for specific data sets with minimal programming using a simplified rules framework. Use complex event processing at the edge or in the cloud to execute rules based on device data and process conditions to deliver only the most relevant data sets. Define data rules that transform and filter data before sending results to cloud applications.

You can combine rules into a single rule set. For example, you could stipulate that if the temperature is below 60°, send data once per minute; if it is above 60°, send data immediately. You can also apply rules to data across multiple sensors. For instance, in managing a fleet, a rule could trigger a specified action if engine temperature goes above 100°, brake temperature over 150°, and oil pressure drops below 40 PSI.
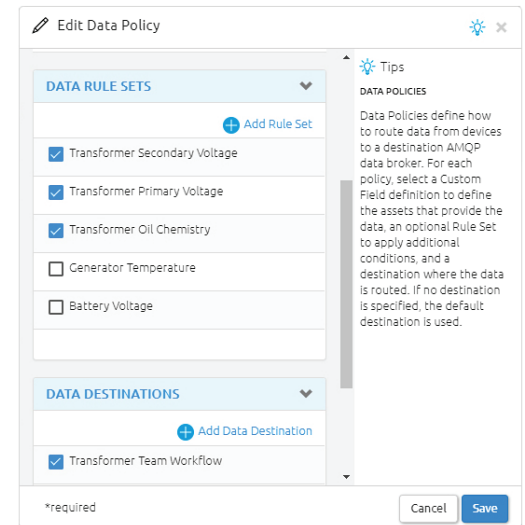
Rule type	Description	Example
Data threshold	When data crosses a threshold, send it to a destination.	If the sensor temperature is greater than 100°, send the data to a desired application.
Transform data	Data can be converted or changed.	If a sensor sends temperature data in Celsius, convert it to Fahrenheit.
Throttle or filter data	Limit or define how often data is sent.	If the asset sends data every 5 seconds, only send it once every 5 minutes instead.

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Optimize your network usage

Use the rules framework to easily define and apply rules to filter and throttle unwanted data and reduce network bandwidth usage. To prevent data loss during a network outage (and to meet stringent data compliance and retention standards in regulated environments), use DCM's pre-built store-and-forward function. If IoT devices lose network connectivity, applications written using DCM's SDK will enable data to be buffered locally, compress data sets, and forward data in batches to cloud applications when connectivity is restored.

Gain powerful control over your data

Cisco Kinetic DCM provides a robust toolkit for managing edge/fog applications along with components that allow you to easily configure policies for data routing and rules for complex event processing. The intuitive dashboard makes it easy to implement and manage your applications from a single pane of glass.

Feature	Details
Policy-based data routing	· Route data from IoT devices to cloud applications supporting AMQP 0.9, AMQP 1.0 and destinations in IBM Watson IoT (MQTT). · Set up and manage your data destinations with no programming via an intuitive user interface, eliminating the need for additional training for IT and OT staff.
Edge / fog application lifecycle manager	Deploy, start, stop, uninstall, and upgrade edge/fog applications: · Support lifecycle management of applications that extract data from standard and vendor specific / custom protocols. · Reduce upfront costs for fog application development by using pre-built functions in the SDK. · Protect your investment and easily upgrade edge/fog applications as your business, data, and technology needs evolve.
Secure remote access	· Gain remote access for troubleshooting and maintenance of IoT devices. · Avoid costly truck rolls by enabling operations and maintenance staff to remotely find and fix device issues.
Rules-based complex event processing from edge to cloud	Create rules based on device data or specific processes to: · Proactively spot anomalies and abnormal behavior. · Filter and throttle data to reduce system bandwidth and overages, and minimize processing and storing unneeded data.

How to order Cisco Kinetic DCM

Supported platforms and gateways

Cisco Kinetic Data Control Module (DCM) supports Cisco industrial gateways (IR 809/829) running Cisco IOx with Java applications, including gateway models:

IR809G-LTE-NA-K9   IR829GW-LTE-NA-AK9   IR829-2LTE-EA-BK9

IR809G-LTE-VZ-K9   IR829GW-LTE-VZ-AK9

Subscription Details

DCM is available as part of the Cisco Kinetic platform subscription. Cloud-hosted DCM is sold based on the number of devices under management. You can purchase a subscription for a 12, 36 or 60 month period. As Cisco Kinetic DCM is a cloud-hosted platform, you will automatically receive periodic updates, so you always have the latest version of the software. You can choose to prepay the subscription price for the entire term or on an annualized basis.

For ordering details, please see the Ordering Guide for this product.

Services & Support

Your Cisco Kinetic DCM software subscription entitles you to limited 12x5 phone / TAC support. The limited support includes access to trained TAC personnel via phone, web and email as well as continuous monitoring of the Kinetic Cloud Operations. You can also access online resources including the knowledge base and tutorials. No additional products, licenses or fees are required to access basic support services with the Cisco Kinetic DCM subscription.

Enhanced support is available for an additional fee.

Learn more

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