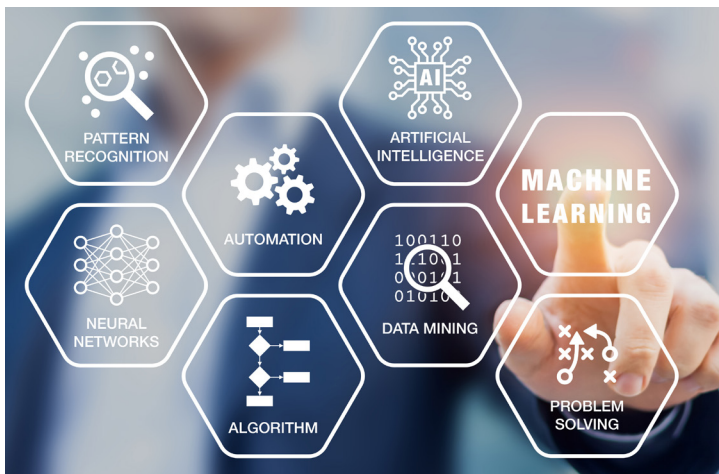


Fact Sheet

Insight+

A New Way of Seeing



A New Analytical Model for Better Decision Making

The speed and extent of business change is intensifying competition, advancing technologies and creating opportunities along with new challenges.

With continuing advancements in networking, cloud, applications (micro-apps), and IoT, the exponential growth of networked devices and the information generated exceeds the capabilities of traditional monitoring and management tools. Adding more staff and more tools is not sufficient to support this evolving new and ever-changing technological landscape. Both have limitations in their ability to create actionable decisions when used alone. This new environment requires a new approach.

That new approach moves beyond the tool-centric model to one that melds the abstract thinking of humans with the computational power of the machine to create an enhanced model of cognition and awareness that is not possible when each works separately. It creates deeper analyses resulting in more than predictive analytics; it creates prescriptive insights to aid decision makers guiding the business and keeping the business profitable, while simultaneously meeting the demands of their customers and the market.

Fujitsu has created a service to satisfy the needs and goals of businesses in order to operate successfully in this new business environment. Insight+ provides deep analytics and prescriptive insights through collaboration between humans and machines.

Analytics Supports a Knowledge-Driven Decision Framework

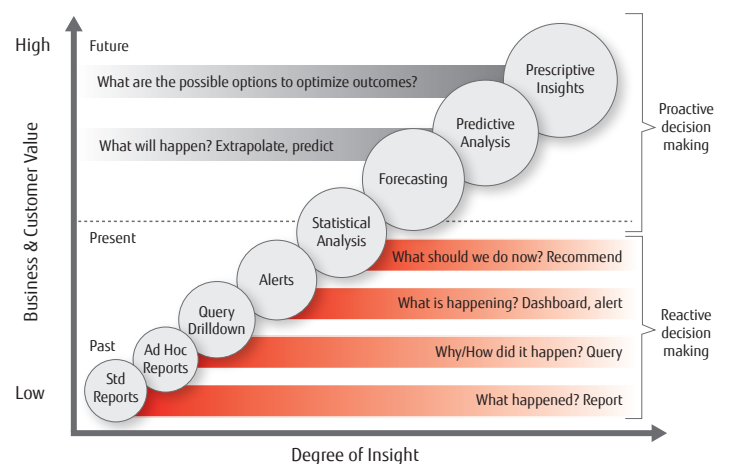
The field of Business Analytics recognizes three types of analytics:

- Type I: Descriptive analytics (the first phase) includes dashboards, reports, alerts and statistics. Relying on historical data, it generates a snapshot of activity limiting its usefulness to areas other than reactive maintenance activities.
- Type II: Predictive Analytics uses statistical and machine learning techniques to model behavior based on historical data and predict future behavior.
- Type III: Prescriptive Analytics recommends actions based on simulation or heuristics creating options for making decisions.

Moving from simple Descriptive Analytics to Prescriptive Analytics increases the efficacy of decisions. (see figure 1) Typically derived using computer-based algorithms and models created by the tool developer, traditional Prescriptive Analytics suffers from a lack of imagination.

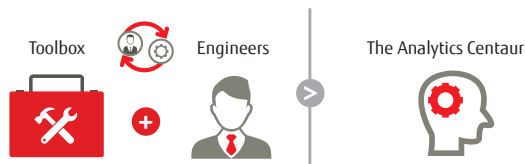
To address this gap, Fujitsu created Insight+ integrating the cognitive acumen of humans into the traditional analytics model to create a degree of perception beyond mere analysis. Insight+ synthesizes human thought with computer-based analytical tools to create more than Prescriptive Analytics. Instead, Insight+ creates Prescriptive Insights – actionable options for making data-driven decisions.

Figure 1: Prescriptive Insights



The Centaur Model

The Insight+ model is constructed around the centaur concept where humans provide knowledge-based guidance resulting in a much higher level of cognition. Humans supply the abstract thinking the machine lacks, while the machine supplies the computational horsepower. Fujitsu's experts collaborate with your internal experts, acting as the human portion of the centaur model, resulting in output more accurate and actionable than that generated individually. One of the major benefits of analytics when combined with human insights is the ability to identify relationships known only to those involved with the network on a regular basis.



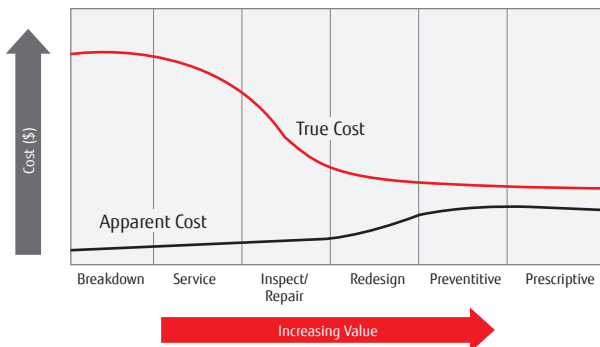
Insight+ is more than an analytics tool, it uses a comprehensive tool kit along with human experts to provide a new way of seeing and acting on data derived from the network. Insight+ works with the data streams of 1000s of products from multiple vendors in multiple network spaces (Layer 2, Layer 3, cloud firewall, inventory, etc.) eliminating silos of data and multiple management systems. It uses all of this data to fuel proactive decision-making models resulting in lower operating costs and better, more accurate decisions.

Prevention is achieved through Prediction

When you consider the cost of an incident as a whole, the old saying "an ounce of prevention is worth a pound of cure" certainly applies. OpEx costs, along with lost revenue and customer reimbursements for broken SLAs, prove that preventing an incident is far less expensive than the cost of the incident itself. (see figure 2)

Previous to an equipment failure, there is typically an identifiable signal within that system's performance data. The ability to see changes in the equipment's operating parameters and analyze those differences over time can surface patterns of poor performance and possible impacts on other systems. This information is elemental to preventing network incidents.

Figure 2: Six Types of Maintenance



Correlating changes significantly reduces MTTR

Changes to the network infrastructure can result in network incidents. Correlating a change with an incident can be a time-consuming effort, leaving the change unrecognized as a source. Any type of change can cause an incident, such as installing a new software release, a configuration change to a network device, or a security policy change, etc.

For example, a change to a QoS parameter may cause VOIP traffic to perform poorly for a few customers. With Insight+, the ability to correlate recent configuration changes with the service issues means that the service can be restored faster.

80% of unplanned outages are caused by poorly planned configuration changes

Improve visibility and accuracy

With the exponential growth in network devices and applications, it is increasingly difficult to make risk assessments without a trusted repository of configuration data. Alerts generated by configuration changes prevent deviations from established best practices and standards. When a change occurs, you can easily investigate the issue and roll back the configuration to its previous state when necessary.

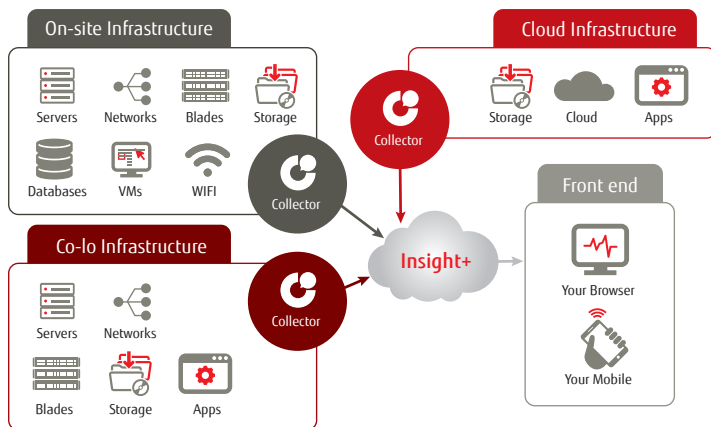
Insight+ can easily change, backup and restore configurations. With this single tool, users can configure any device with a host name and SNMP string. Moreover, a single tool means a single user interface (UI). The Insight+ UI makes it easy to click between the configuration details and the performance data, eliminating the need to consult multiple vendor-specific management tools when working with your network's configuration.

Decisions at all levels of the organization

Decisions are made by users at all levels of the organization, each with their own requirements. Customer support staff need to receive alerts and troubleshoot incidents, requiring drilling up and down into information. Their managers want reports on network performance to plan maintenance updates and prevent network incidents. Network Planning and Finance require analytics to support their network growth and investment models. Insight+ gives decision makers at all levels the analysis and recommendations their role demands. More importantly, Insight+ restores control of the decision-making process, increasing operational efficiency, reducing cost and creating more options for network growth. Insight+ Technology Highlights

Insight+ Technology Highlights

Insight+ does not require installation of active agents on each resource, creating an agentless solution. Using 100MB Java, the Collector application is installed in targeted locations within your infrastructure. The Collectors retrieve data using standard monitoring protocols, and then forward the information to the cloud-based Insight+ platform. Devices to be monitored are easily added by supplying the IP address or DNS name to the Collector. The Collector establishes communication with the resource, automatically retrieving resource information. The data collected is consolidated and is accessible from anywhere via an Internet connection.



Network Scanning for Devices

The Insight+ Collector can periodically scan the network and automatically discover devices. Scans can be either scheduled or run on demand. When a new resource is discovered, it is named by its response to sysName (SNMP,) reverse DNS resolution, or the IP address. Upon discovery, the new resource is placed into the group; Unmonitored Netscan (UN) and it is not monitored until the resource is added to a named group. Resources in the UN group do not incur any costs.

Templates get you Started

Insight+ includes templates for thousands of pre-configured data sources to instantly begin monitoring the majority of resources in your infrastructure. Insight+ provides templates for monitoring particular types of data sources (network device, database, application, cloud resource) including metrics to collect and graphs to display. The templates also include performance values that indicate an issue that needs attention, as well as the optimal collection method (JDBC for SQL server and SNMP for Cisco router) for that data source.

Granular Data Storage

Data retention is defined by the service term. Collector event history is stored for 7 days and alert history for up to 2 years (max: 10,000 alerts.) Insight+ avoids overwhelming graphs by aggregating data, while still allowing users the option of zooming in to see granular historical data where desired.

Setup alerts for a resource

Multiple types of alerts are available with Insight+. One type of alert is based on meeting a threshold criteria where each data point can be subject to three thresholds (one for each severity level). The alert trigger interval indicates the polling intervals the data point value must meet in order to trigger an alert. Likewise, the clear alert interval indicates the polling intervals the data point value must meet in order to clear the alert. Most data sources come with pre-configured default thresholds, but thresholds can be adjusted to better fit your operating model.

Route Alerts

Insight+ offers flexible alert notification routing. Alert notification can be delivered via email, text message or voice call, and can also be routed to different teams as well as third-party systems. If a recipient is unable to respond to an alert, the alert is automatically sent to the next person in the escalation chain to eliminate the risk of missed calls.

Control User Access

User roles with specific permissions can be created, limiting the access and abilities of personnel. Once roles are created, users are added by selecting the role and sections of your account they can access. Permissions granted are shown in the tabs of the UI. The UI shows only the tabs they have permission to use, hiding any other tabs and reducing the possibility of unauthorized activities.

Dashboards

Different groups of Insight+ users can create and customize their dashboards. Dashboards can provide at-a-glance view, comprehensive views of status, centralized metrics, executive overview of business metrics, targeted insights into the infrastructure, and a scratchpad for root cause analysis. These dashboards can be shared or private. Shared dashboards can be seen by anyone, but can be restricted to particular users by applying a custom role to those users. Private dashboards are seen only by the creator.

Reports

Insight+ has built-in reports for alerts, monitored data, devices, websites, cloud resource, dashboards and user accounts. Custom reports can be created to better suit the needs of individual users.

Configuration Management

By collecting data directly from operational devices and software, Insight+ provides an accurate repository of configuration data. Collecting configuration and performance data in the same platform means users can view, manage, receive alerts, and restore configurations. Features such as Active Discovery, change detection, custom alerting and automatic backup ensure system compliance and enable performance to be correlated with configuration changes, reducing the time spent on investigation and MTTR.

Advanced Capabilities

- REST API to programmatically query and manage resources: dashboards, devices, reports, services, alerts, collectors, data sources and more.
- Third-party system integration; for example, ServiceNow Configuration Management Database (CMDB) allowing bi-directional synchronization.

Analytics

Insight+ uses a combination of methods to analyze data collected from sources, and create prescriptive insights. While each model has its strengths, this multi-pronged approach to analysis yields information that is significantly more useful than when using each model discretely.

Insight+ Methods of analysis:

- **Anomaly Detection Visualization** – Employs advanced machine learning algorithm to identify data that does not conform to expected or usual patterns to provide insight into resource behavior.
- **Data Forecasting** – Applies a capacity trending algorithm to find a model of best fit for the collected data and calculate future data based on these model parameters.
- **Topology Mapping** – Provides a visual representation of relationships among resources, whether a physical location of components or logical relationship. Users can navigate resources, identify root cause, troubleshoot alerts on a map, and discover relationships.
- **Root Cause Analysis** – Highlights the originating cause of the incident, while suppressing dependent alerts to reduce alert noise.

Ready to Go

Insight+ is a subscription-based, pay-as-you-go model offering a cost-effective service that supports data-driven decisions. Insight+ scales based on the number of resources being monitored. With unlimited users, custom dashboards and access to Fujitsu experts, Insight+ allows you to rapidly realize the benefits of prescriptive insights.

Fujitsu not only delivers innovative products, we possess the experience, the expertise and collaborative work ethic to become a valued team member to your organization.

Why Fujitsu?

Fujitsu is putting our two decades of managed network services experience to work for you—

- Researching best-in-class technology,
- Recommending how to best use analytic tools,
- Collaborating with Fujitsu’s networking experts,
- Periodically assessing your network to identify actions to improve services to your customers.

Fujitsu offers more than insights into your network and infrastructure, helping you turn those insights into reality.

Complementary professional services available are:

- **Fiber Assurance** – Provides 24x7x365 remote monitoring of fiber assets. In the case of an incident, Fujitsu will provide event notification, an event diagnosis and its location. Repair personnel can be dispatched to the event site for fast remediation. Periodic and ad hoc reports are also available.
- **Managed Network Services** – Provides 24x7x365 remote monitoring, management, notification, troubleshooting and provisioning services from our world-class, US-based Network Operations Center (NOC). These services bring carrier-class operations to business-critical network infrastructure, offering the peace of mind that comes with reliable protection.
- **Network Assessment and Consultation** – Provides infrastructure readiness, operations readiness, and performance characterization with best practice recommendations on next steps to achieve business objectives.
- **Micro-apps** – Provides development of a highly focused, task-based application that is a collection of functions.

Fujitsu Network Communications, Inc.

2801 Telecom Parkway, Richardson, TX 75082

Tel: 888.362.7763

us.fujitsu.com/telecom