Dig into your data with fast, flexible analytics

FUJITSU

Hybrid Data Analytics powered by ManageNow®

shaping tomorrow with you

Introducing Hybrid Data Analytics

Discover a simple, cost-effective way to store, see and analyze your data with Hybrid Data Analytics. It's flexible. It's scalable. And it's ready to run on dedicated platforms, or in the cloud.

What is the analytics challenge?

Where there's data, there's value. One of your best strategic assets is the data you have on your market, customers, assets and processes. It can help you make better decisions that put you ahead of your competition. It can give you a window into evolving markets and your customers' behaviour. And it can show you how to save money with more efficient processes.

But what's the best way to harness and analyze your data to get these insights? And how do you make sure your investment in big data will get you the biggest returns?

There are plenty of tools you can use to get more from your data. But which work best? Which drive the greatest value? How do you ensure the solution you choose will work now and in the future?

Hybrid Data Analytics is the answer.

It's a service that:

- Provides real-time analysis, taking the focus away from end of month reports.
- Reduces the need to manually analyze your data.
- Scales up and down to meet your needs.
- Offers the best mix of open-source solutions.
- Works 'out of the box' and is easy to deploy.
- Can be used and moved across different platforms, including cloud and on premise.
- Gives you peace of mind, with experts on hand to support and consult as you need.

We manage the service from start to finish, so you can focus on getting the best from your data.

What is Hybrid Data Analytics?

Pinpointing problems before they happen.

A large manufacturing plant in Germany needed to store and process data from its production lines. So,it chose our solution. The plant's employees can now see the relationships between machine behaviour and potential problems in real time. And they can analyze data about machines and quality testing in one place.

What is Hybrid Data Analytics?

You'll get everything you need for live operations with our solution, which combines OpenSource tools and our expertise. It enables you to:

- Stay up and running even if one server fails, thanks to a cluster-based design.
- Add servers to a live cluster if you need more capacity.
- Stop servers in a live cluster for patching.
- Draw on managed and support services for all components of the system.
- Access everything you need in one place with our online portal.
- View pre-defined dashboards or create your own through data queries.

It doesn't matter whether you have a small test environment for development work or a full-scale production environment. You can build what you need for the size of your projects. And moving between environments is easy. Or, you can use the platform from FUJITSU Cloud Service K5. You get complete flexibility and the security of a fully managed solution, backed by one of the largest system integrators in the world.

For more complex data analysis, prediction or machine learning solutions, you can get additional support from our data scientists. You also have the option of using Hybrid Data Analytics as your own development platform.

What's in a cluster?

Our platform runs on Linux servers. In one cluster, there's:

- **A deployment server** – This holds the Docker scripts that build the other systems and expand the cluster when needed.
- **Cluster master(s)** – This gives you the web portal to access the dashboards and running data searches.
- **Worker nodes** – This provides the data storage capacity and the query / analysis processing power.

A cluster will copy all your stored data across three worker nodes. So, even if one node isn't available, you can still run queries.

How is data indexed?

A range of data indexing options are available for you to choose from with Elasticsearch and Graylog. If you're not sure which approach is best, our data scientists can help you decide.

The flexible graphing and display systems of Kibana, Grafana and Graylog come with the platform as standard. You can configure these systems to show predefined dashboards or use them for ad-hoc queries to drill down into the stored data.

You can view dashboards directly through Hybrid Data Analytics, or embed links in other web pages or portals.

What comes with Hybrid Data Analytics?

Hadoop HDFS An industry standard and widely used data store that works with many other analytics tools.

Elasticsearch / Logstash / Kibana These well-established OpenSource solutions can help you with data loading, indexing and searching.

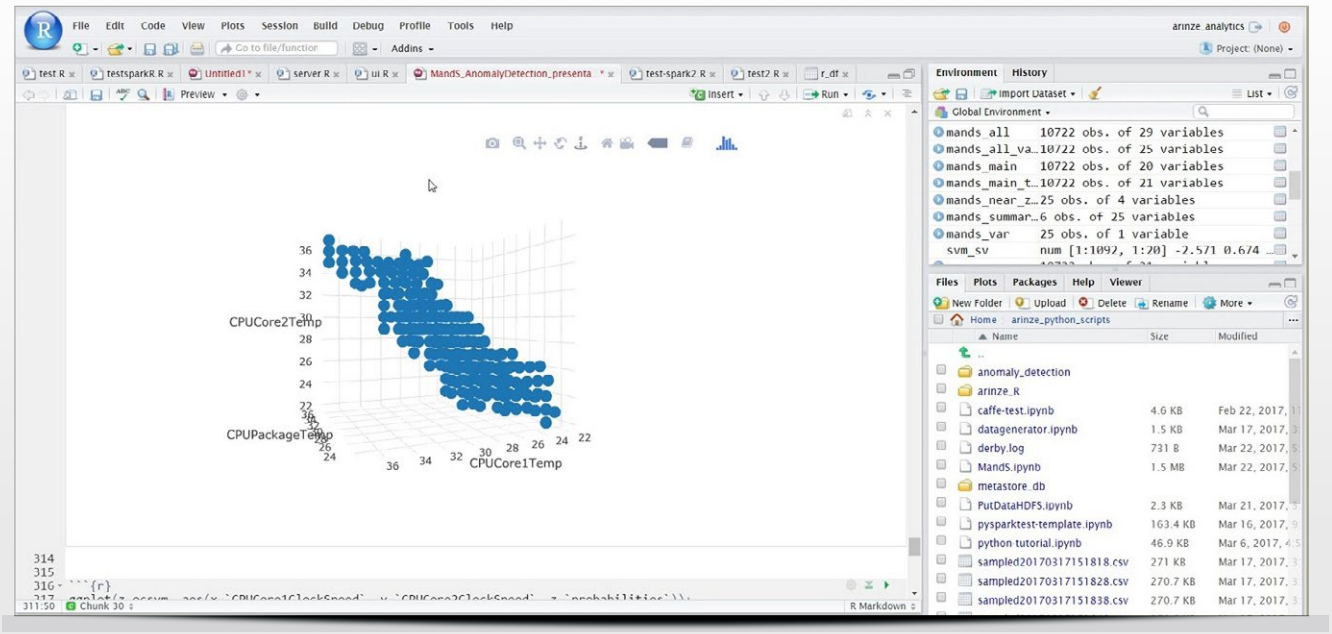
Grafana and Graylog You can add extra reporting functionality to Kibana with these query and dashboarding tools.

Spark and Spark Streaming These allow you to analyze historic and streaming data.

Jupyter Notebook Provides an interface for data scientist to work and collaborate on code, machine learning and modelling.

Docker Docker scripts create containers in the servers of the MN4DA cluster and deploy all the necessary components.

How it works



Data visualization

You get a complete set of tools to turn raw data into insightful reports, graphs and dashboards with our solution.

Logstash processes and loads the data. Then, once Elasticsearch and Graylog have indexed it, you can query it, search it and turn it into charts, including:

- Line, bar and pie charts
- Word clouds
- Maps showing locations (for geo-spatial data)

You can create dashboards as 'read only' displays for reporting standard business metrics, or providing full query facilities to drill down into source data.

Bespoke analytics development

Other tools or bespoke programmes can access your data with our solution. This could be by direct access in HDFS, or via Spark and Spark Streaming.

If you need help solving complex analytical challenges, just talk to our data scientists.

How it works

You'll have our platform up and running in no time at all. We designed, tested and built with pre-configured scripts. To get you started, we:

1. Decide the size of the system you need and deploy a set of Linux servers to support the cluster.
2. Install the hybrid data analytics Docker build scripts on the controller server.
3. Run the scripts to install Docker, create the necessary containers and start up the system.
4. Then you're all set to load data, run queries and create dashboards and develop sophisticated analytics programmes.

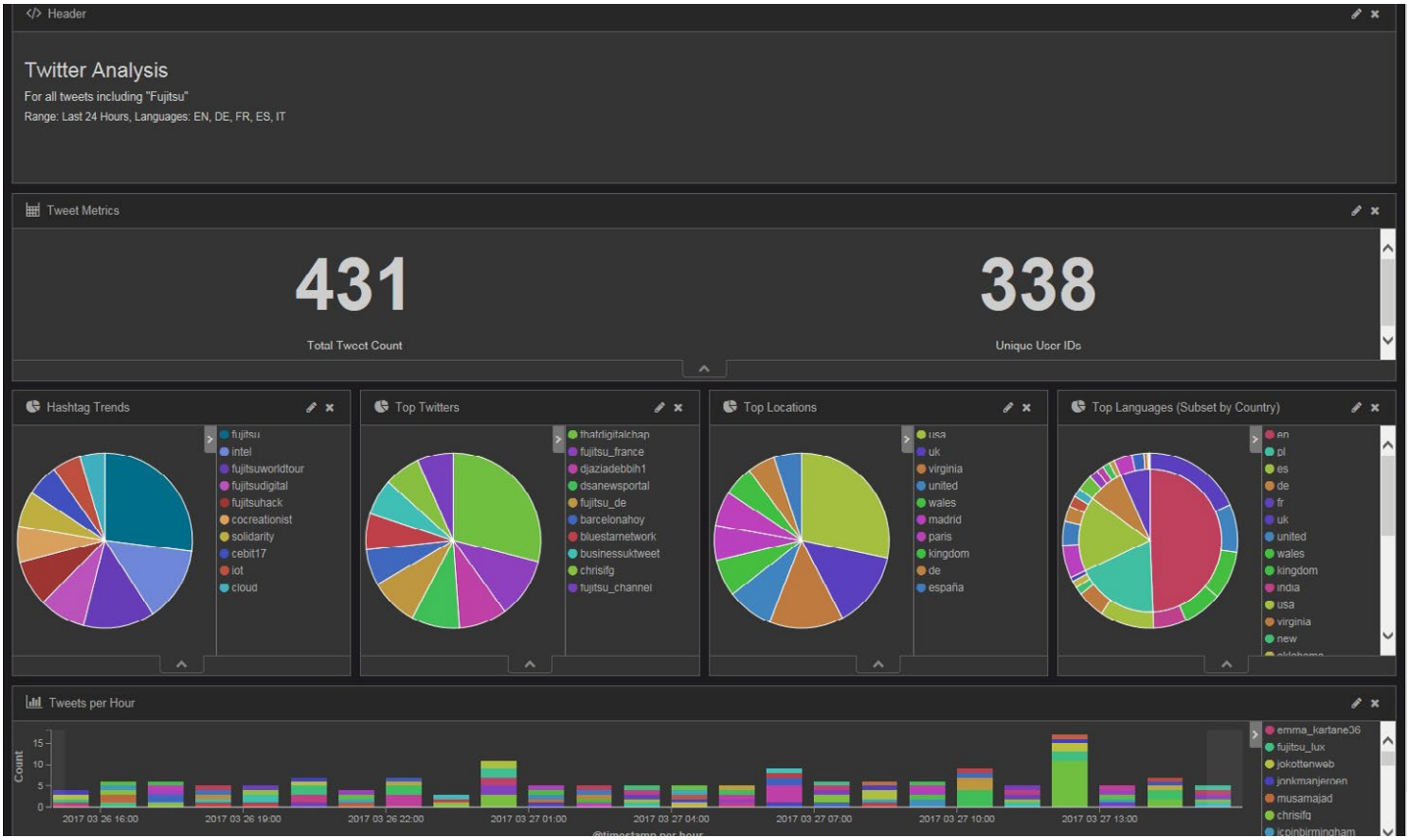
Fully managed solution

You can get Hybrid Data Analytics as a fully managed solution, running on the Fujitsu Cloud Service K5 or dedicated servers. Our support staff will manage everything from our Global Delivery Centres.

With the managed solution, you get:

- A hybrid data analytics system that's built and ready to use.
- A cloud solution you can access in business hours or 24/7.
- System support for Linux and hybrid data analytics applications.
- Patching and updates for the solution's components.
- Optional support to help you configure data feeds or develop custom analytics solutions.

Data at your finger tips



Data analysis

The displays you can view with our solution include:

- Pie, line and bar charts.
- Statistical counts, sums and averages.
- Word clouds of commonly used words in searched text.
- Maps that show locations of geographic data with GPS co-ordinates.

You can also develop your own bespoke display.

→ To find out more, contact us.

Simple charging scale

You can build our analytics solution to the size that suits your project, whether it's for a development project or a live operation.

The solution runs on a range of environments. That means you can migrate any work you develop in a small test environment to a large live environment running in the cloud or on dedicated hardware. The build is the same in every case.

Pay per cluster node

The licence price includes:

- The Hybrid Data Analytics licence and annual support.
- Docker scripts to build the initial cluster.
- Docker scripts to add extra nodes to the cluster when you need.

Deployment and setup varies by project and is charged separately.

Custom services and solutions

Once the system is running, we can help you get started with loading your data and tailoring your analytics reporting to meet your specific project needs. You'll get access to experts who will help you:

- Deploy servers and Hybrid Data Analytics software.
- Configure the solution to accept batch data or stream of live data feeds.
- Enhance the value of your data through data filtering or data transformation.
- Develop custom reports, dashboards and alerts.
- Develop sophisticated analytics or machine-learning programmes.

If you have a specific requirement, get in touch and we'll be happy to discuss how we can help.

Why choose Hybrid Data Analytics?

There are many advantages to using our solution over directly deploying OpenSource tools:

Free up your resources – You'll cut the amount of effort spent on setting up tools. Which means you can concentrate your resources on other areas of your business.

Start fast – You can get started right away. There's no long design phase. And it's quick to implement, with automated build scripts.

Have complete confidence – The solution is fully tested. And can you get support for the entire system around the clock.

Gain extra services – These can include loading data and creating reports or fully customized solutions using our data science expertise.

Reduce your costs – You're not tied to one vendor, and don't have to commit to a high-volume licence up front. You can start small and grow, keeping costs down with OpenSource software.

Unlock the value in your data with Hybrid Data Analytics.

Start getting more out of your data with Hybrid Data Analytics.

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