Quickly, Easily Derive Insights From Your Data

Cardinality analytics software on Dell EMC hardware brings flexibility and speed to telco analytics use cases

If you’re a communications service provider, you recognize the value of extracting insights from your data to optimize operations, improve profitability, boost customer satisfaction and enable services in next-gen technology domains like 5G and Internet of Things (IoT). Since it’s likely that you already have an existing analytics solution in place, you probably have first-hand experience with the challenges posed by the sheer volume, variety and velocity of the data you need to process as well as the subsequent architectural and algorithmic complexities and a shortage of skills within your organization to address these challenges.

The good news is that telco data analytics doesn’t have to be so hard. Dell Technologies and analytics software provider Cardinality (cardinality.co.uk) have joined forces to help you speed deployment and maximize the ROI of your analytics solutions with our joint offering: Dell Technologies Service Provider Analytics with Cardinality.

Dell and Cardinality enable you to deploy an advanced analytics solution from scratch, or complement your existing analytics platform with flexible solutions built from validated reference architectures that are quick to implement and easy to scale.

Simplify and speed deployment with use-case templates

Reduce costs, boost revenue and increase customer loyalty with a wide variety of analytics use cases. Cardinality makes it easy to get started with prebuilt templates for the following use cases:

- Customer experience management
- Cell experience
- Service management
- Service assurance
- Service operations center (SOC)
- Fraud and security
- Operational intelligence
- Churn reduction
- Device/terminal intelligence

Speed deployment and decision-making with a validated reference architecture

By combining analytics software from Cardinality with Dell EMC hardware — including Dell EMC PowerEdge servers, Dell EMC Isilon and Dell EMC ECS storage arrays — Dell Technologies makes it easier than ever for communications service providers to derive business value from their network and subscriber data.

Cardinality brings advanced data streaming, data analytics and machine learning capabilities together into a cloud-native, Kubernetes®-based platform called Perception. Perception is designed to benefit everyone in the organization:

- **The data integration engineer** benefits from out-of-the-box compatibility with telco data sets and the ability to scale to massive data environments.
- **The data engineer** benefits from the ability to perform large-volume, real-time analysis and to design and automate complex data pipelines and use cases with a simple GUI.
• **The data scientist** benefits from the flexibility to use his or her preferred programming languages and applications to build and train machine learning models.

• **The business user** benefits from being free to choose visualization and reporting tools and from having access to a library of prebuilt use cases that accelerate time-to-insight.

The data ingestion capabilities of Cardinality’s Perception platform are customized for telco data sets and provide you with everything you need out of the box, making Dell Technologies Service Provider Analytics with Cardinality incredibly easy to deploy. Just “plug” Perception into the network and start generating insights.

Dell Technologies provides the hardware on which to effectively run the Cardinality Perception Platform. This architecture is based on a foundation of Intel® Xeon® processors, enabling a highly scalable compute platform capable of handling both today’s and tomorrow’s analytics requirements.

Dell Technologies adds flexibility to the joint solution by allowing you to pick and choose purpose-built hardware components. Build your solution based on what you need and gain peace of mind knowing that you’re getting high reliability and performance.

**Key solution benefits**

• **Telco-specific solution** — A telco-focused, out-of-the-box solution that’s easy and quick to implement, helping you to reduce TCO and maximize ROI.

• **Rapid speed of deployment** — “Drop” Cardinality Perception into any telco environment and ingest data from multiple sources with little-to-no customization.

• **Ease-of-use** — The Cardinality visual user interface makes it easy for data engineers and scientists to set up data pipelines for any use case, no matter how complex.

• **Ready-to-deploy solutions** — Use-case templates speed deployment, getting you up and running quickly.

“One of our biggest projects is NCX — our network customer experience measure — which is based on the machine learning algorithm and takes into account more than 300 KPIs.”

— Alexey Sutyagin, Head of Network Analytics, O2 (Telefonica UK)
Analytics can decrease cost of retaining customers by 15%

Explore the benefits that advanced analytics offer to telcos looking to take a customer-centric view of operations. The whitepaper below highlights the benefits and quantifies the ROI for operators who choose to deploy Dell Technologies Service Provider Analytics with Cardinality.

Why choose Dell and Cardinality for telco data analytics?

Whether you’re deploying a brand new analytics solution or looking to solve complexity and performance issues in an existing deployment, Dell Technologies and Cardinality can help you meet your goals with a rapidly deployable solution that can start generating data-driven insights in less time and at lower cost than most alternatives on the market today. Together, we offer unique advantages, including:

- **Real-time analysis** — Bypass the data lake and generate insights faster.
- **Openness and flexibility** — Designed with heterogeneity in mind, broadening your range of architectural choices.
- **Scalability** — Start small and grow big. Deploy only what you need today with the confidence that your environment can grow with your business needs.

1 IDC Vendor Revenue, “WW Quarterly Cloud IT Infrastructure Tracker,” April 2020.