D&LLTechnologies

Solution Brief

Dell Private Wireless with Airspan and Druid

Validated Design with Airspan Radio Access Network (RAN) and Druid Mobile Core

Enabling the Enterprise of the Future with enterprise 5G mobile connectivity

Summary – What is Dell Private Wireless with Airspan and Druid?

- A Dell Technologies end-to-end validated private wireless solution built in partnership with Airspan and Druid
- An "edge-native" enterprise solution that supports many use cases including enterprise communications, mobile edge computing, cellular IoT, and more.
- Designed for simplicity highly interactable with Enterprise IT / OT systems.
- Dell Technologies' purpose-built hardware designed for small, powerful data processing at a small footprint and power consumption.
- 5G C-Band and CBRS private wireless capable.
- Dell professional services for private wireless deployments

With the exponential data growth driven by autonomous infrastructure, Enterprise workloads demand Private Wireless solutions' stringent latency and reliability requirements. These enhancements are key conditions to bring additional services to expanding industry verticals. Private Wireless solutions enable innovative use cases such as smarter logistics, fleet management, surveillance, asset tracking, quality inspection, and Autonomous Guided Vehicles (AGVs).

Enterprises can leverage private wireless to solve business challenges and enable desired outcomes that increase operational efficiencies or generate new revenue streams. It provides reliable quality of service, speed and latency of edge connectivity for business-critical applications, and massive device connectivity, unleashing the full potential of 5G edge applications.

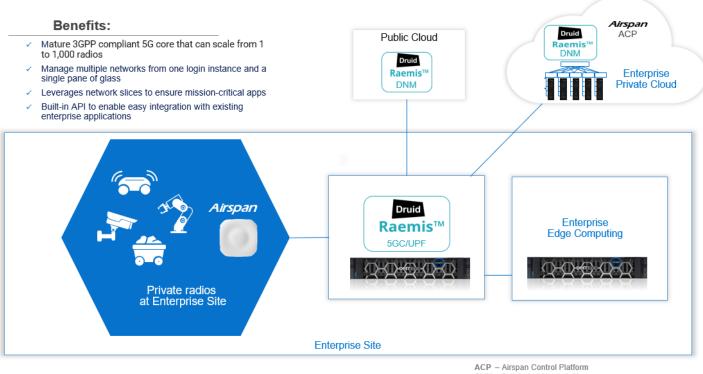
In partnership with Airspan and Druid, Dell Technologies offers enterprises an end-to-end validated solution featuring best-of-breed, components from industry leaders in network transformation. Dell Private Wireless solution is designed for enterprises that require real-time, reliable and secure data connectivity for thousands of remote edge technologies distributed across their edge locations. This solution enables enterprises to evolve with less complexity and reduced time to value, and customers have the flexibility to choose to purchase it as a managed service, as a stand-alone solution, or as a hybrid CapEx/OpEx model.

We also provide a comprehensive suite of services for private wireless deployment to allow enterprises to scale their business by leveraging Dell's extensive presence in the enterprise space.

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Dell Private Wireless with Airspan and Druid



DNM – Distributed Network Manager

Dell Private Wireless with Airspan and Druid provides a unique, open, validated solution built with industry leaders. The solution includes all the necessary private wireless components including the Radio Access Network (RAN) hardware and software, 5G core and operations/management elements.

The solution components include the following:

- RAN Airspan AirVelocity 1901 and Airvelocity 2700 radios along with RAN CU/DU software
- 5G Core Druid Raemis™
- Infrastructure platforms Dell PowerEdge XR4000 or VxRail HCI

The validated solution has been tested in our labs to ensure the interworking of all solution components.

Dell Technologies + Airspan - Dell Technologies has validated its private wireless solution with two Airspan radio solutions including the Airspan AirVelocity 1901 and AirVelocity 2700.

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MM

Sub-6

GHz

CBRS

Supported

4T4R

Tx/Rx

Paths

Airspan AirVelocity 1901

The AirVelocity 1901 is a 5G-NR, all-in-one gNB sub-6 Hz indoor solution consisting of a RU, DU, and CU in a single unit, it provides network adaptability for operators. It is also available in a CBRS variant that is part of Airspan's end-to-end 5G CBRS portfolio. The AirVelocity 1901 delivers enhanced, indoor network coverage and capacity.

Some features of the AirVelocity 1901 include: **Easy installation** - utilizes 3GPP Full gNodeB architecture for ease of installation and deployment.

Compact and lightweight design - Its smart and compact form factor, designed for modern environments, allows flexible mounting options on walls or ceilings.

Network Intelligence - feature-rich with complemented RIC algorithms, the AirVelocity 1901 supports network slicing, monitoring and healing.

Airspan AirVelocity 2700

The Airspan OpenRANGE06 AirVelocity 2700 (RU) provides 5G-NR sub-6 GHz indoor coverage. Meeting the demand for indoor connectivity, it is an ideal and powerful solution to deliver a superior network access experience. It supports O-RAN split 7.2x for deployment flexibility in an open interface architecture. The AirVelocity 2700 is also available in a CBRS variant

Some features of the AirVelocity 2700 include: **Superior Indoor vRAN Solution** - dramatically improves speeds while reducing costs with 4T4R.

Cost Savings - split architecture is ideal for indoor use cases, resulting in substantial cost savings.

Smart, Compact, and Light Form Factor - utilize quick plugn-play for rapid deployments with flexible mounting options on walls, ceilings, and suspended ceilings.



Up to

100 MHz

Band-

width

Split

7.2x



For the 5G core, we have partnered with Druid Software. Druid is a leading 5G core provider that has thousands of deployments across a wide spectrum of use cases. The core platform, Raemis[™], is a mature 3GPP compliant 4G and 5G core network with unique features specifically designed for Enterprise Critical Communications. Some examples of the feature set include:

- Ability to prioritize devices and provide them with guaranteed quality of service.
- Interoperate with virtually any small cell RAN vendor, including Airspan.
- Easily scale up as well as down to enable solutions from very small or large private networks.
- Raemis[™] includes open REST APIs that provide easy integration to enterprise-critical applications.
- Includes a friendly dashboard that makes 5G private networks simple to use and manage.
- Available Distributed Network Manager to deploy and manage remote private networks from a single pane of glass.
- Druid's Raemis platform can be deployed in different configurations to deliver unique business value for your customers.



Dell Private Wireless – Services reduce complexity and accelerate time to value

Dell Technologies Services offering can help Enterprises to reduce the complexity of deploying and maintaining Enterprise Edge networks.

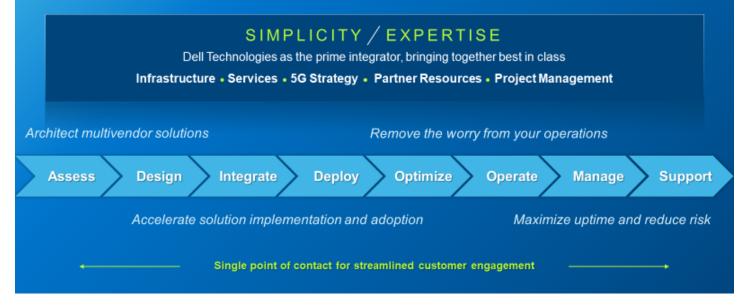
Focused on simplicity, our services suite enables our customers to concentrate on their main business and realize critical & relevant use cases for their business success.

Services offering:

- Project Management
- Design services
- RAN Deployment/Commissioning/Integration services
- System integration services
- Optimization services
- Managed Services
- o On-site support

Enterprise customers of private mobility have different needs and preferences in terms of suppliers and consumption models. Some want to leverage CSP know-how and assets (spectrum, connectivity, existing contracts, etc.), while others will choose to nurture relationships directly with vendors and vertical integrators.

Achieve business outcomes through tailored adoption of validated solutions



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Why Dell Private Wireless?

A standalone Private Wireless solution with Edge computing serve as a platform to support multiple enterprise applications. These applications play a crucial role in supporting various business outcomes, such as workforce productivity, operational efficiency, quality improvements, cost savings, workplace safety, and sustainability.

By combining the capabilities of edge computing with the benefits of private 5G, we can build a comprehensive solution that meets specific needs for today while putting in place a robust foundation that supports the enterprise's digital transformation journey.

Dell Technologies is committed to helping enterprises transform their networks to leverage private wireless and unleash the full potential of 5G edge applications to solve business challenges and enable desired outcomes.

With Airspan and Druid, Dell Technologies is bringing an open, best-of-breed approach to the telecommunications industry to help enterprises unlock innovation faster and deliver game-changing services for enterprises.

With Dell Technologies, enterprises have access to the latest hardware and software innovations, a global supply chain that leads the world, and a rich ecosystem of partners that build the future on open standards and cloud-native principles.



Future-proof implementation, end-to-end management and support

To learn more visit Dell.com/private-wireless-enterprise

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