LUNAR DIGITAL

Hybrid Media Cloud

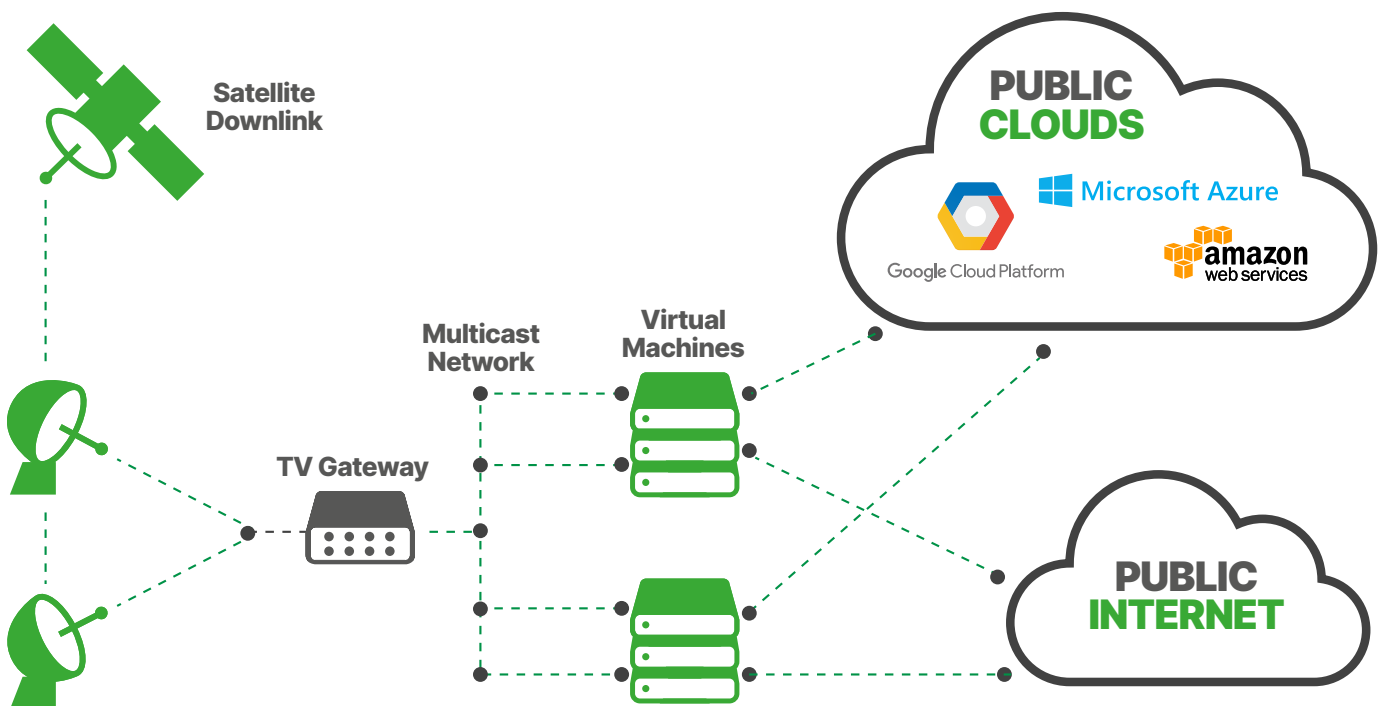# What is the Lunar Digital Hybrid Media Cloud?

Would you like to be able to capture live TV, Radio, Satellite and Cable and stream them directly over an IP network at any resolution without the headache of building your own satellite farm, data centre, IP network and deploying hundreds of devices? Then the Lunar Digital Hybrid Media Cloud Platform is for you! With multiple satellites capturing thousands of channels throughout the UK, Europe, North Africa and the Middle East, Lunar Digital is your partner of choice when it comes to live capture TV.

Advantages for Media Companies

- Access to multiple satellites and thousands of channels throughout the UK and EMEA from Lunar Digital's UK data centres

- Access to Lunar Digital's low latency high capacity multicast enabled network

- No need to deploy hardware to receive and stream channels

- Access to LD Cloud Connect providing direct access to AWS, Microsoft Azure and Google Cloud Platform

- Access to Lunar Digital's Virtual Machines on the multicast network to ingest channels and perform analysis

The Lunar Digital Hybrid Media Cloud

Lunar Digital's Hybrid Media Cloud Platform is the digital platform of choice for media and streaming customers. The platform enables customers to capture live TV, Radio and Satellite or Cable channels and stream them directly over an IP network at any resolution. Using our multicast network ensures that streams are only delivered to applications that require them providing scalability. Streams can be delivered to clients equipment colocated within our data centres, Virtual Machines provided by Lunar Digital or streamed over our Cloud Connect service directly to AWS, Microsoft Azure or Google Cloud.

Satellite Downlink

PUBLIC CLOUDS

Microsoft Azure

Google Cloud Platform

amazon web services

Multicast Network

Virtual Machines

TV Gateway

PUBLIC INTERNET

Satellite Downlink

Optical frequency distribution from on-site Satellite farm.

LD 24×7×365 Support

Our engineers are skilled in Satellite distribution, Unix and Linux as well as cabling and general remote hands services. Expert network engineers qualified to CCIE level offering Cisco networking support are also available to clients on a 24 × 7 × 365 basis.

TV Gateway

Capture live digital TV and radio channels from any terrestrial, satellite or cable source and stream them directly over an IP network at any resolution.

Multicast Network

Using our multicast network ensures that streams are only delivered to applications that require them and this optimises the utilisation on the LAN and gives much more scalability.

Virtual Machines

We deploy high spec Virtual Machines that are ready to ingest the multicast streams. This allows our clients to simply install their chosen build on to the VMs and not have to worry about the underlying infrastructure which is maintained and operated by Lunar Digital.
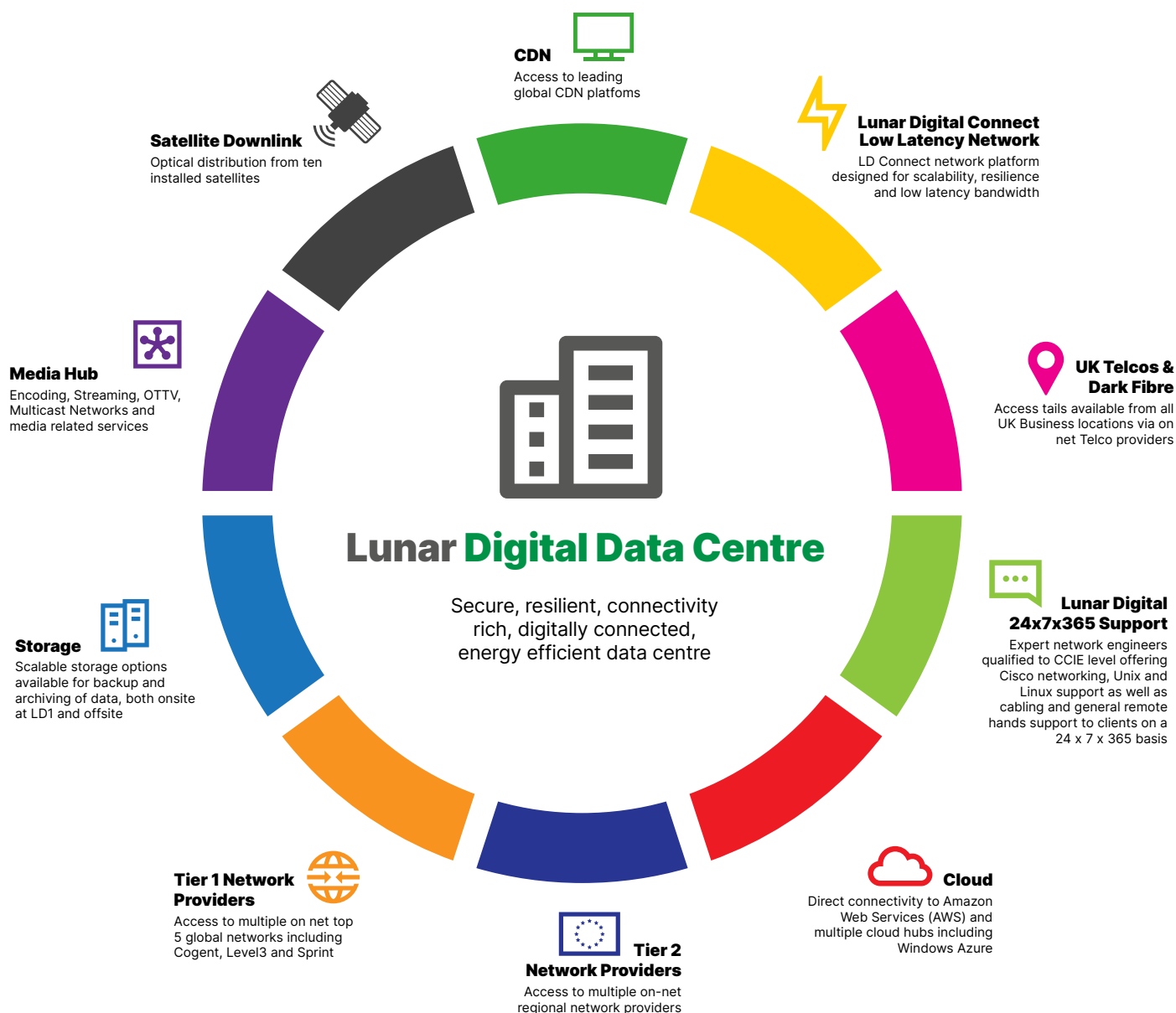
Public Internet

Clients can use the LD Connect network platform for Internet Connectivity which has been designed for scalability, resilience and low latency bandwidth. We peer with the worlds leading network providers and also the largest IXPs in Europe. They can also peer directly on any on net provider of their choice as all Lunar Digital Data Centres are carrier neutral and well connected.

Public Clouds

We can offer clients direct connectivity to Amazon Web Services (AWS) and multiple cloud hubs including Windows Azure and Google Cloud to give a direct low latency and private connection to scalable compute and storage for analytics data.

The digital media
and streaming
platform of choice

CDN
Access to leading global CDN platforms

Lunar Digital Connect Low Latency Network
LD Connect network platform designed for scalability, resilience and low latency bandwidth

Satellite Downlink
Optical distribution from ten installed satellites

UK Telcos & Dark Fibre
Access tails available from all UK Business locations via on net Telco providers

Media Hub
Encoding, Streaming, OTTV, Multicast Networks and media related services

Lunar Digital 24x7x365 Support
Expert network engineers qualified to CCIE level offering Cisco networking, Unix and Linux support as well as cabling and general remote hands support to clients on a 24 x 7 x 365 basis

Storage
Scalable storage options available for backup and archiving of data, both onsite at LD1 and offsite

Lunar Digital Data Centre
Secure, resilient, connectivity rich, digitally connected, energy efficient data centre

Cloud
Direct connectivity to Amazon Web Services (AWS) and multiple cloud hubs including Windows Azure

Tier 1 Network Providers
Access to multiple on net top 5 global networks including Cogent, Level3 and Sprint

Tier 2 Network Providers
Access to multiple on-net regional network providers

Lunar Digital's media cloud platform enables customers to capture live TV, Radio and Satellite or Cable channels and stream them directly over an IP network at any resolution to any destination.
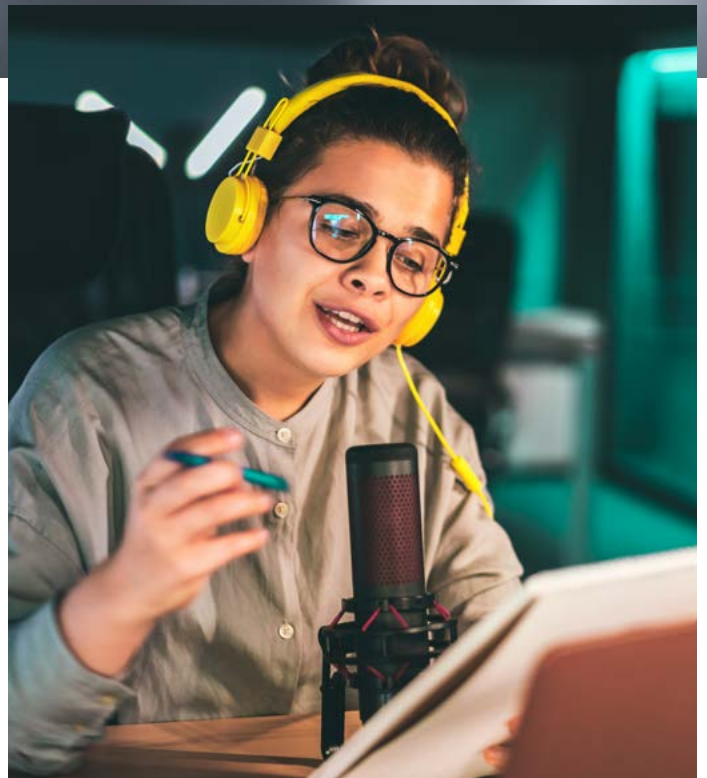
By becoming an Lunar Digital streaming and media customer, you get access to all of the below technologies, designed to enhance your streaming experience.

- Direct satellite links to equipment
- Web Streaming
- Streaming Media Platforms
- Multicast Services
- Mobile Streaming
- IPTV Broadcast
- Media on Demand
- OTT Media
- Specialist Hardware
- Media Storage
- Media Cloud Solutions
- Content Delivery Networks
- High Bandwidth Networks
- Dark Fibre for Heavy Traffic
- Online Radio Distribution
- Media Trend Analysis

Secure, resilient and energy efficient data centre

At the heart of the Media platform are the Lunar Digital Data Centres. This facility is designed for maximum power resilience with N plus N power to each cabinet, energy efficiency with green electricity from renewable sources and fixed electricity pricing until 2023. The facility scales up to 1100 rack footprints and is manned 24 × 7 × 365.

As a carrier neutral colocation provider, Lunar Digital offers a thriving network ecosystem boasting a range of Tier1 and Tier2 networks, dark fibre providers and direct low latency access to a number of leading Internet Exchange points, IP Transit and Bandwidth providers, Content Delivery Networks and Metro & Long Reach Ethernet circuit providers.

24 X 7 Support

Media Platform members benefit from Lunar Digital's data centre remote hands and technical services team. Support is provided by the highly skilled Lunar Digital team including Windows, Unix and Linux support, Cisco networking support to CCIE level, racking, cabling and general remote hands available 24 × 7 × 365.

Low Latency Network

LD Connect has developed a low latency multi-homed network targeted at members who don't have the experience of dealing with ISPs and Internet Registries, but still require a fast connection to the Internet. This network platform has been created by peering with the largest IP networks in the world as well as the largest Internet Exchange Points in Europe. We can establish direct connections for our clients with the major global ISPs and remove network hops and latency, giving a consistent and fast direct connection. The network is resilient with built in dual core network architecture with multiple redundant network POPs in LD1 and Telehouse North giving multiple 10Gbps network capability.

CDN

LD1 benefits from being on net with Level (3)'s global Content Distribution Network. Direct peering is also available to other leading global CDNs including Akamai and other CDNs from Media Platform members.

UK Telcos & Dark Fibre

A carrier neutral approach is essential to offer full network flexibility. LD1 and LD2 are located in a prime city location, which boasts the best available internet connectivity. A choice of Tier1 and Tier2 networks are available, plus dark fibre circuits from multiple providers with diverse entry points into the building. Lunar Digital provides direct access to leading Internet Exchange points and direct connectivity to other data centres in the UK and Europe. Lunar Digital also offers direct connectivity into Amazon Web Services, Microsoft Azure and Google Cloud Platform with our LD Cloud Connect Service.

Media Hub

Media Hub services are available through the Lunar Digital Media Platform enabling services such as downlinking, encoding, packaging, storage and secure streaming of premium broadcast content, including Digital Rights Management solutions from Adobe and Microsoft.

The hub currently downlinks and encodes over 100 channels for various broadcasters and is able to offer high quality multi bitrate streaming in a wide variety of format (including HLS, RTMP, HDS, RTSP, HTTP, Smooth Streaming and MPEG Dash). The Hub's multi-platform Live Streaming solution includes comprehensive rights management, EPG ingest, video ad serving, integrated paywall capabilities, real-time analytics and integrations with multiple CDN (Content Delivery Network) partners.

Satellite Downlink

Lunar Digital have deployed multiple optical distribution systems to downlink multiple satellite frequencies from our satellite farm. The system gives Lunar Digital the ability to hand off multiple feed types to its members from a single coax feed to an optical feed allowing the client to build their own in rack highly scalable distribution system.

Cloud

Lunar Digital Media Platform customers can connect to AWS, Microsoft Azure and Google Cloud Platform directly from the Lunar Digital data centre via a simple cross-connect that can be established within days. Customers are able to achieve sub millisecond latency between their infrastructure and AWS infrastructure, resulting in improved application performance and security. This service is available in Lunar Digital from multiple on-net providers.

Storage

Lunar Digital have delivered an enterprise standard multi tenanted storage vault located in our two geographically diverse data centre locations forming the LD Cloud. Customers can backup their data into our public cloud with logical separation of data and also diverse geographic separation between two locations. The Lunar Digital public cloud solution uses the Asigra platform which doesn't use backup agents and is platform agnostic. Data is compressed and encrypted at source giving efficient use of bandwidth and military grade encryption when transporting data to the vault. Using Asigra means there is less administration over head and thus lower costs to our clients.
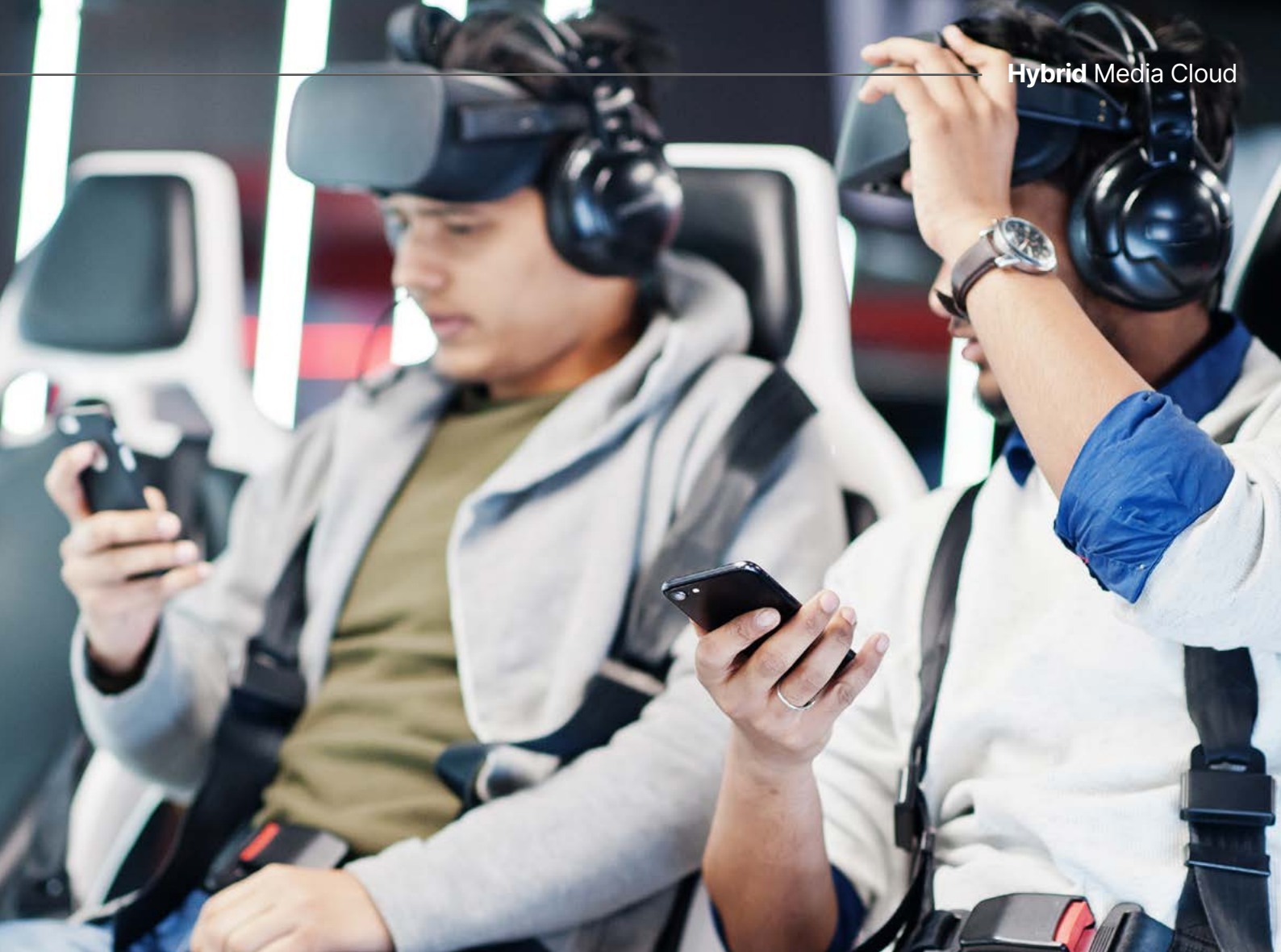
Global Tier 1 Networks

Clients in the LD1 and LD2 data centres can connect directly to the largest IP networks in the world via a simple cross connect including:
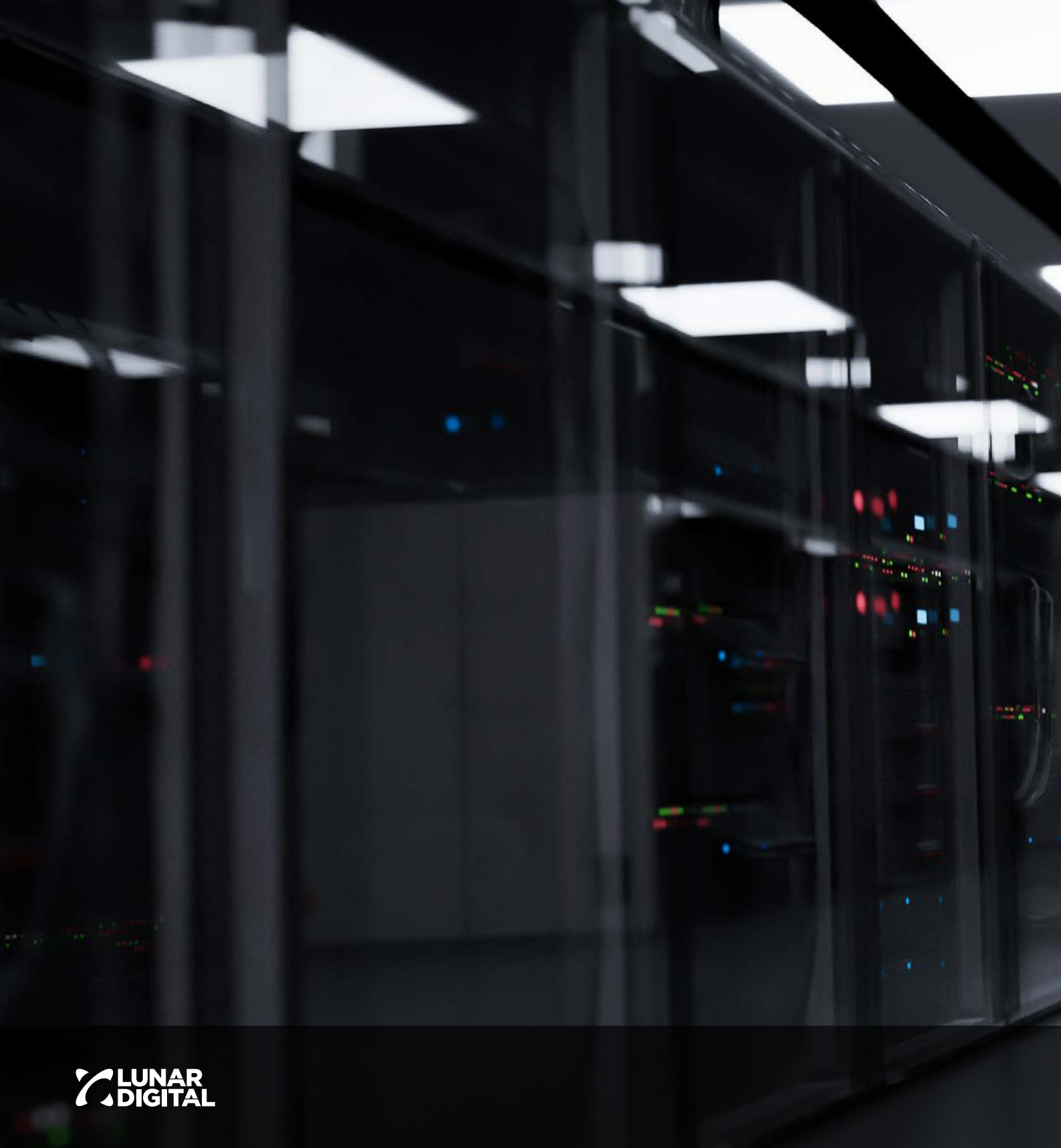
- Level(3) which has the largest IP backbone globally Cogent Communications which now a top 5 globally connected network
- Sprint which is ranked as a top 10 globally connected network provider
- NTT which is globally renowned as being the second largest IP network provider and can also be provided into Lunar Digital via a backhaul network.

European Tier 2 Networks

Clients in the LD1 and LD2 data centres can benefit from the best regional peering by using one of the many on-net tier 2 service providers. These providers provide an array of connectivity options and the list is growing all the time.

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