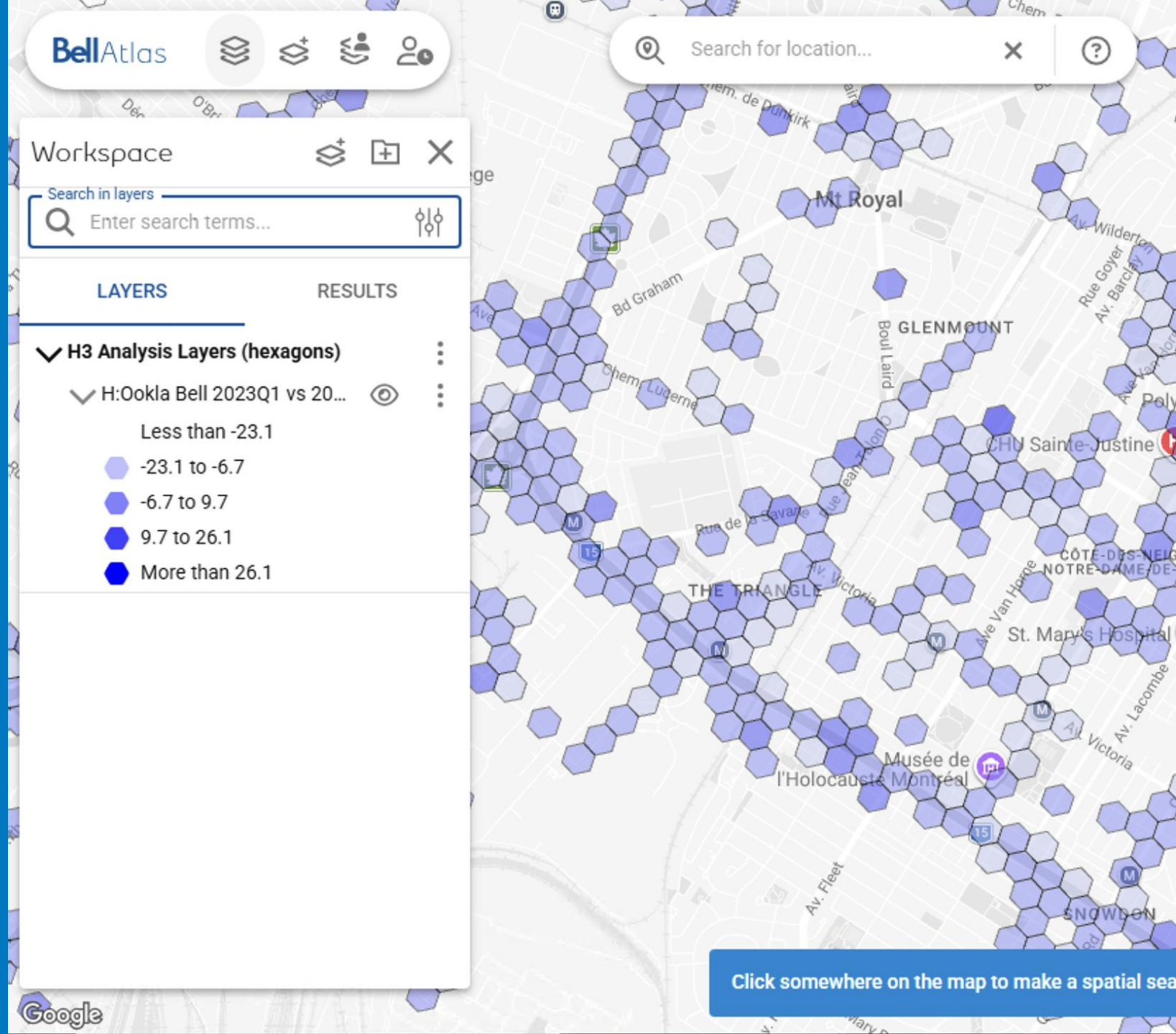


Bell Atlas ELIS

A Journey of Enterprise
Geospatial Consolidation
evolving to GeoAI



Click somewhere on the map to make a spatial search

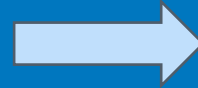
BCE and Bell Canada

- Founded: 1880
- Employees: 53 000
- Largest communications provider in Canada
- Wireless Network: 9.43M+ Subscribers
- Wireline Network: 7.65M+ Subscribers
- Media & Content (Bell Media)
- Enterprise & Technology Solutions

2000

FROM

Informal ad-hoc GIS support



TO

Formal enterprise GIS group
serving all Bell Mobility groups

Team of 5-8 GIS Specialists
4000+ analysis requests per year

2007: A mission with many challenges...

- Small GIS Group to support very large group of users
- Diverse set of users technical and non-technical users (engineering, vs tech support, marketing, etc)
- Scattered data sources siloed between Wireline/Wireless, network/customer
- Increasingly complex 3G Wireless Coverage Data
- Mixed GIS ecosystem

2009: Bell Atlas: Consolidation Initiative

- Initiate Korem collaboration analysis and recommendation
- Establish Guiding Principles
 - *Simplicity, Flexibility, Usability for Large Scale User Adoption*
 - *Performance, Security, Stability for Enterprise Deployment and large-scale datasets*
 - *Open & Modular Architecture and data publishing autonomy for Enterprise Data Integration*
 - *Customization, Extensibility & Automation for Continuous Innovation*
- Start implementing the custom solution based on Google Earth Enterprise targeted for Tech-Support/RF Engineering

2020: Evolving Challenges forcing Tech Evolution

4G, 5G, Fixed Wireless Access and
Fibre Expansion



Increasing Data size Complexity and
update frequency

Increasing need for Network
performance monitoring



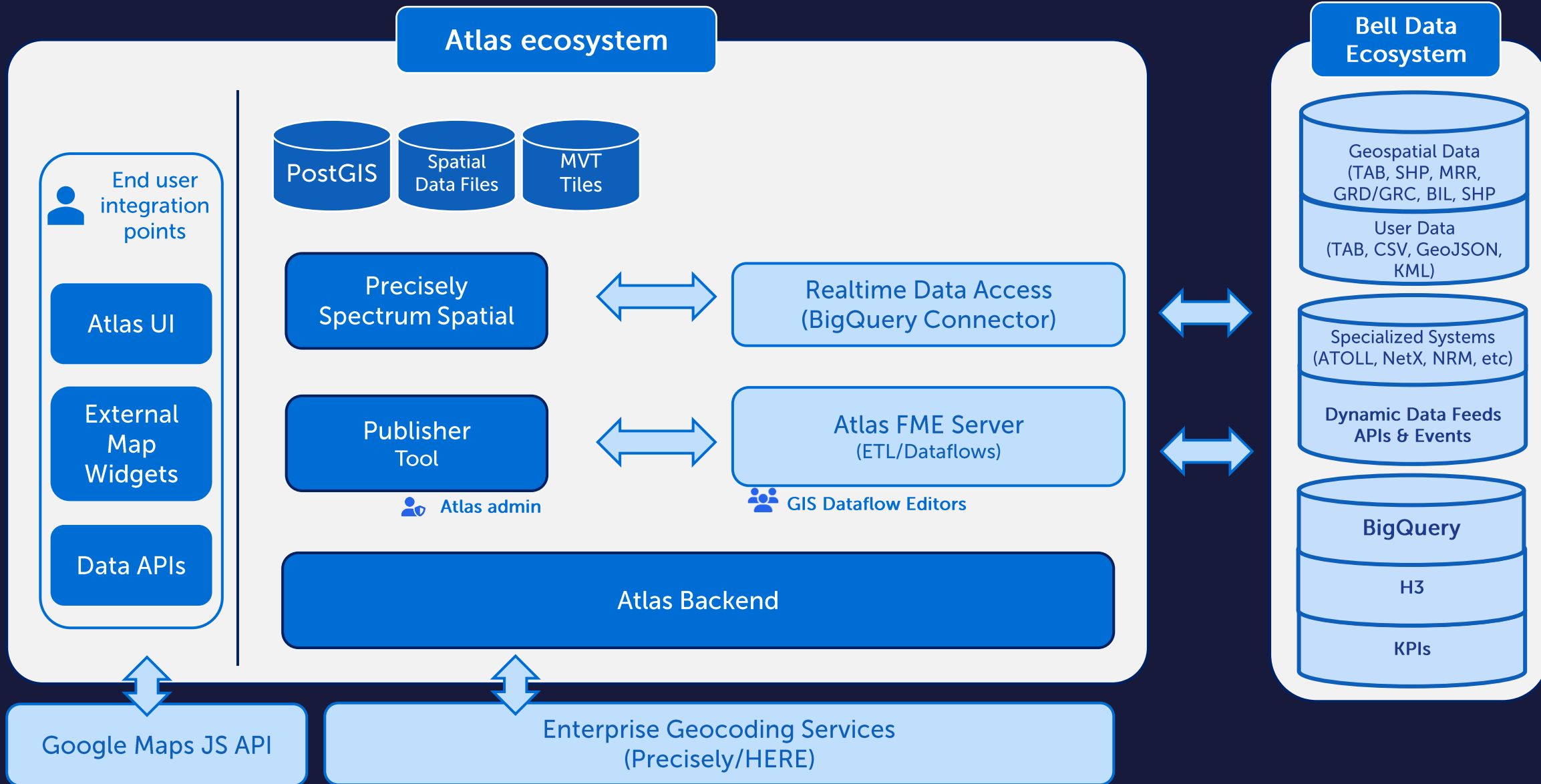
Need for BigData capabilities and
Real-Time data integration

Increasing Users base



Increasing Users base and scalability
requirements

Atlas Agentic Architecture



Bell Atlas

The screenshot displays the Bell Atlas web application interface. At the top left, the "BellAtlas" logo is visible alongside icons for layers, a user profile, and a search function. A search bar in the top center contains the text "Search for location...". The top right corner features a toolbar with icons for map navigation (hand, pan, zoom), layer management, and other map controls.

On the left side, a "Workspace" panel is open, containing a search bar for layers and a list of layers. The "LAYERS" section includes:

- BestServer_visible_copies (with a visibility icon)
- LTE_FDD_Band1900_BestS... (with a visibility icon)
- LTE_FDD_Band1900_RSRP (with a visibility icon)

The main map area shows a geographical region with a river and roads. A road labeled "330" is highlighted in green. A mouse cursor is positioned over a small green icon on the map. On the right side of the map, there is a vertical toolbar with icons for map navigation (compass, search, person), zoom in (+), zoom out (-), and a full-screen icon.



Simplicity, Flexibility, Usability for Large Scale User Adoption

- 2000+ users
- 25+ user groups/departments
- Self-serve cover most of the user analysis request, leaving only 200 ad-hoc requests per year



Performance, Security, Stability for Enterprise Deployment and large-scale dataset

- Bell Titanium security grade
- Metric for smooth performance



Open & Modular Architecture and data publishing autonomy for Enterprise Data Integration

- 2700+ layers
- 30TB+ of data
- 25+ data sources (systems/databases)
- 15 000 Automated and Manual Data updates per year
- Supported by a Team of 3 GIS specialists



Extensibility & Automation for Continuous Innovation

- Real-Time Outages Integration
- BigData integration
- Automated Ingestion of network data (Forsk Atoll)
- KPI/AI roadmap



Bell Atlas Guiding Principles

(Current state)

Future Geospatial Telco perspective...

Network Data
Convergence

Technology Consolidation
and Cloud-Native
Integration

GeoAgentic integration via
MCP

