

## CUSTOMER CHALLENGES

*Weather patterns influence business decisions every day and many global industries including travel and transportation, retailers, restaurants, insurance companies, including military operations and political elections. In recent years, the amount of weather data has increased exponentially through high resolution image models, radar products and scans, increased access to satellite data, and an explosion of weather observations with new devices and social media. All of this data requires faster processing, more storage and computing resources with increased security.*

At Unisys we provide complex, reliable, and timely data and products to organizations around the globe that rely on mission-critical weather information every day to solve real business problems. Our weather data services integrity is unparalleled in the industry and our decades of experience providing high quality weather to businesses worldwide speak to our depth of knowledge and skills in the weather enterprise.

By leveraging industry experts in security, applications modernization, cloud services and advanced analytics, Unisys brings a rare depth of expertise and insight to meet the challenges and demands of Governments, businesses, and consumers.

Unisys Weather Information and Technology Solutions currently provides a wide breadth of weather products and value-added services.

▪ **Our Weather Data Products and Services offer:**

- A large data warehouse of worldwide real-time meteorological information;
- Comprehensive data feeds of global observations of ground, atmospheric, weather satellite, and radar data;
- Enterprise-grade reliability, redundancy, and 24x7 monitoring;
- Multiple secure channels (satellite, the Internet, and dedicated lines) ensure data communication with 99.9% or better availability;
- Patented national and regional radar mosaics;
- And mobile access with customized visualization tools.

▪ **Our Weather Application Products and Services offer:**

- A unique configurable turn-key NOAAPort Gateway system capable of receiving the full NWS Satellite Broadcast Network (SBN) bandwidth;
- And, customizing scalable and flexible solutions including mobile apps.



Weather Domain  
Expert Consulting

## Managed Weather Information Services



Cloud Migration

### Application Product and Services



NOAAPORT  
Gateway



Custom Software &  
Integration



Mobile Enablement

### Weather Analytics



Environmental  
Modeling



Advanced  
Operation  
Analytics



Climate Data  
Analytics

### Partner Solutions



AccuWeather



## UNISYS WEATHER

### Data Product and Services

WeatherMAX

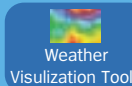
Weather  
Processor (WXP)



Internet Delivery



Satellite Delivery



Weather  
Visualization Tools

Model Forecast  
Products

### Consumers



DELTA

- **Our Weather Analytics Service:** Utilizes advanced analytics and big weather data to generate weather knowledge and insights to optimize mission critical operations, facilitate climate analysis, and environmental modeling.
- **Our Managed Weather Information Service offers:**
  - Consulting services from Unisys in-house weather expert for a highly tailored solution;
  - Assisted weather data migration and weather application modernization by leveraging Unisys Cloud Migration and Application Modernization capabilities.

### Delivering Weather Solutions and Services Empowered by Knowledge

Unisys delivers the right people, process, portfolio and performance by; providing customized integrated solutions tailored to fit customer specific requirements. We leverage our domain expertise, unique tool sets, and industry partners to deliver high-quality, value added services.

At the foundation, Unisys collects global and national weather data from weather sensors such as weather radars, satellites, surface and upper air sensors, lightning detectors, and other weather sources in its WeatherMax datacenter.

### The Unisys WeatherMax datacenter features include:

- Primary and backup data feeds for critical weather information;
- An on-site satellite transmission facility with redundant signal processors;
- An on-site power generation and backup power feeds
- Clustered processing systems with hot failover and backup capabilities;
- Monitoring and alerting for data center health;
- Physical and logical security at all levels, including Unisys Stealth™ for world-class security;
- 24x7 operations staff and help desk; and staff meteorologists.

The data is delivered to customers via satellite, the Internet, and dedicated lines. By employing LDM, FTP, and TCP/IP distribution services with Product Arrival Notifications (PAN), Unisys clients will never miss a critical warning or related products.

Beyond the raw weather data, Unisys has developed innovative weather processing techniques to serve the enterprise. For example, Unisys National Radar Mosaics can filter and remove non-weather information from radars using patented algorithms, generate accurate and relevant information for further analysis. Unisys Weather Processor (WXP), an XML conversion & visualization tool, can present weather data in a simple, elegant and useful manner.

Unisys' application services employs Agile, responsive development techniques merged with industry standards, open architecture, combined with a rich client user experience to quickly integrate, test, and deploy modern weather software.

Unisys also offers expanded services for new type of weather feeds (MRMS, NDFD, RTMA, GOES-R), by using industry standards such as (netCDF, LDM, XML, GeoJSON, REST and SOAP). This process of the DevOps approach and agile development will deliver the specialized product and services timely with premium quality.

We also employ machine learning and domain-specific data fusion/correlation, along with the weather data, to provide various level of analytics (Descriptive, Predictive, and Prescriptive). This allows us to deliver optimized mission-critical operations.

We also leverage our public cloud partnerships with Amazon AWS and Microsoft Azure to ensure a successful migration of weather applications and data to the cloud.

## WHY UNISYS?

*Unisys is a global information technology company that specializes in providing industry-focused solutions integrated with leading-edge security to clients in the government, financial services and commercial markets. Unisys offerings include security solutions, advanced data analytics, cloud and infrastructure services, application services and application and server software. For more information, visit [www.unisys.com](http://www.unisys.com).*

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