



NOAA/NWS

WMO Information System (WIS)

GISC Washington DAR
(Discovery, Access and Retrieval)

By Walter Smith

(May 16, 2012)



Agenda



-
- WIS – WMO Information System
 - GISC - Global Information System Center
 - DAR Catalogue
 - Metadata
 - GISC Washington DAR



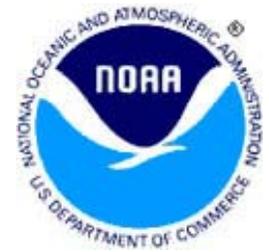
The WMO Information System (WIS)



- Built upon the Global Telecommunication System (GTS) of WMO's World Weather Watch
- Pillar of the WMO strategy for managing and moving weather, water and climate information in the 21st century
- Provides the standardized (Open Archives Initiative-OAI) data collection/distribution approach.
- Provides DAR (Discovery, Access and Retrieval) service.



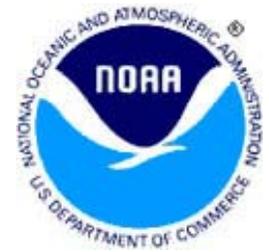
Type of WIS Center



- GISC – Global Information System Center
- DCPC – Data Collection or Production Center
- NC - National Center



The GISC



- Collects/delivers observed data and products for global distribution
- Maintains 24 hour data cache
- Maintains a DAR (Discovery, Access and Retrieval) catalogue
- Exchanges DAR catalogue with other GISCs
- Provides web interface tool to access data



The DAR Catalogue



- Provides locating/retrieving weather information capability
- Contains categories of metadata

DAR Catalogue

Category Germany



Category France



Category Washington



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Metadata Concept

Weather Data



- Dynamic Information
For example: 70 % chance of rain, wind speed
- Static Information
Who
Where
When
What
- Static Information -> Metadata



Metadata

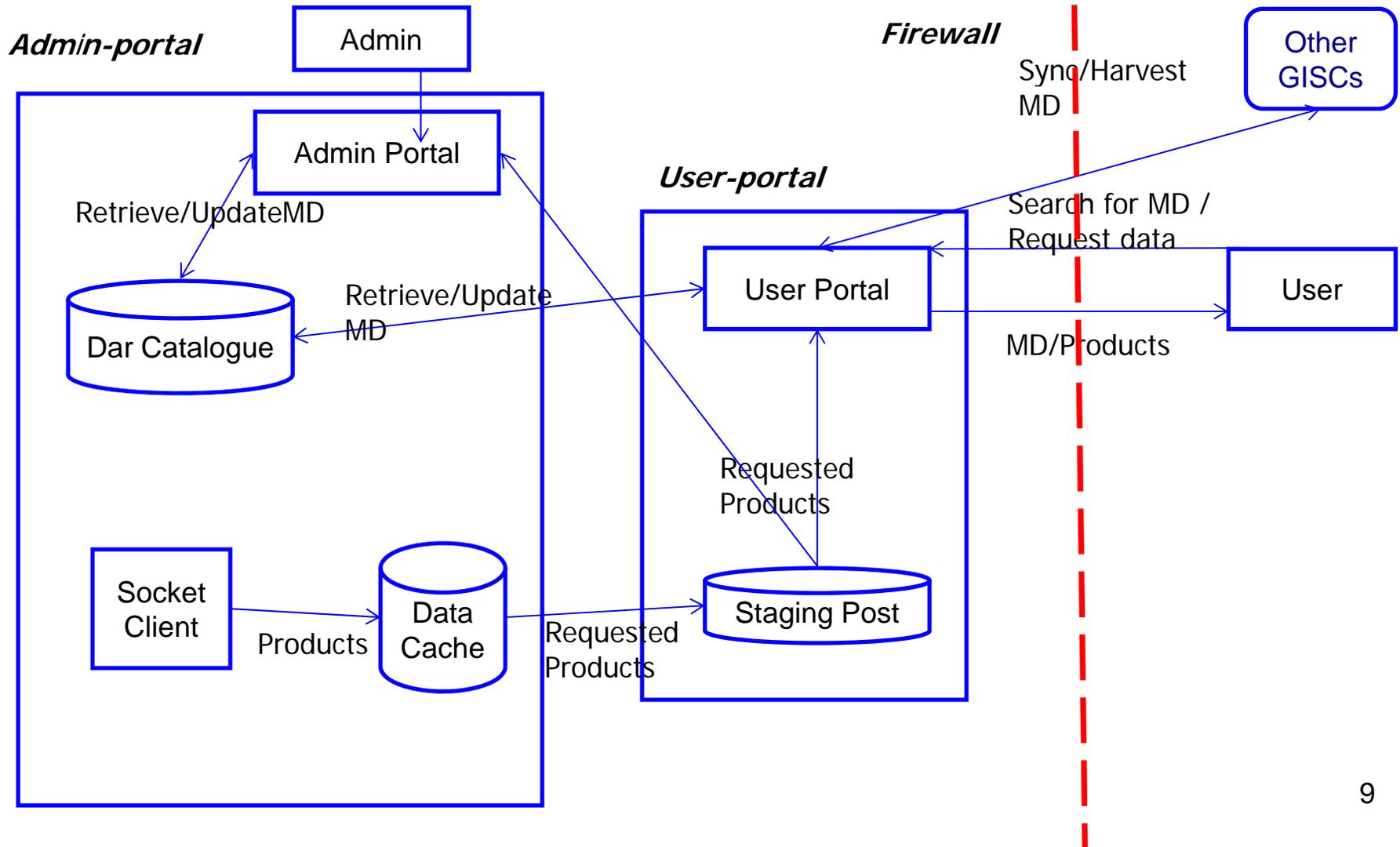
(Static Info of Weather Data)



- The data about data
- In Extensible Markup Language (XML) file format
- Uses ISO 19115 and ISO 19139 standards for the description of metadata
- Some examples of metadata elements
 - Title, Content description, Geographic and temporal extents, Responsible party



GISC WASHINGTON DAR ARCHITECTURE





English ▾

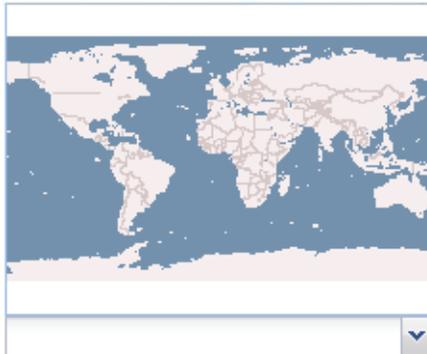
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FIND INTERACTIVE MAPS, GIS DATASETS, SATELLITE IMAGERY AND RELATED APPLICATIONS

OPENWIS PURPOSE IS:

- To improve access to and integrated use of spatial data and information
- To support decision making
- To promote multidisciplinary approaches to sustainable development
- To enhance understanding of the benefits of geographic information

OpenWIS allows to easily share geographically referenced thematic information between different organizations. For more information please contact

What's New

- Draft Stop-Gap metadata generated for bulletin



English ▾

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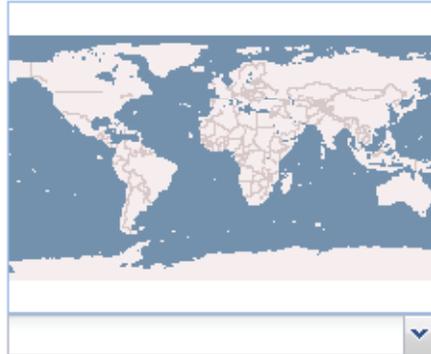
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What's New

- Draft Stop-Gap metadata generated for bulletin USAK02KWBC
- Draft Stop-Gap metadata

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actions

■ **Abstract**

--- The bulletin is coded as BUFR code form: FM 94 (BUFR, Binary universal form for the representation of meteorological data) . (Refer to WMO No.308 - Manual on Codes for the definition of WMO ...

■ **Keywords**

Atmospheric conditions 07316 07330 07335 07360 07434 07438 07510 07524 07530 07535 07540 07558 07602 07610 07621 07622 07627 07630 07632 Surface data land -- Hourly synoptic observations from fixed-land stations (SYNOP)

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actions

■ **Abstract**

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■ **Keywords**



GISC Status



What we can do now:

- DAR catalogue search and retrieval
- Exchange DAR catalogues with other GISC

What we will be doing:

- Implement a 24 hours data cache interface
- Implement the complete GISC Washington metadata set



Project Challenges



-
- Metadata – from who creates the metadata to what standard is NOAA going to use
 - Meeting WMO timeline (5 Approved & 3 being Audited in May)
 - Setting up the GISC while incorporating DCPC's and NC's
 - Responsible for all Region IV
 - Communications/collaboration



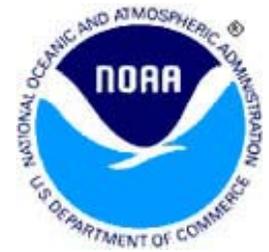
Project Points of Contact



- WIS Program Manager – La'Tanya Burton
- Project Manager – Melinda Randolph
- Technical Project Manager – Pat Gillis
- Architect – Craig Donahue
- Metadata Team Lead – Walter Smith
- Application Developer – Walt Mussante
- Application Developer – Ling-Yuan Tai



Acronym List



- WIS - WMO Information System
- GISC - Global Information System Center
- DAR - Discovery Access Retrieval
- ISO - International Organization of Standards
- OAI - Open Archives Initiative (develops and promotes interoperability standards that aim to facilitate the efficient dissemination of content)