



INFORMATION
MANUFACTURING

Overview

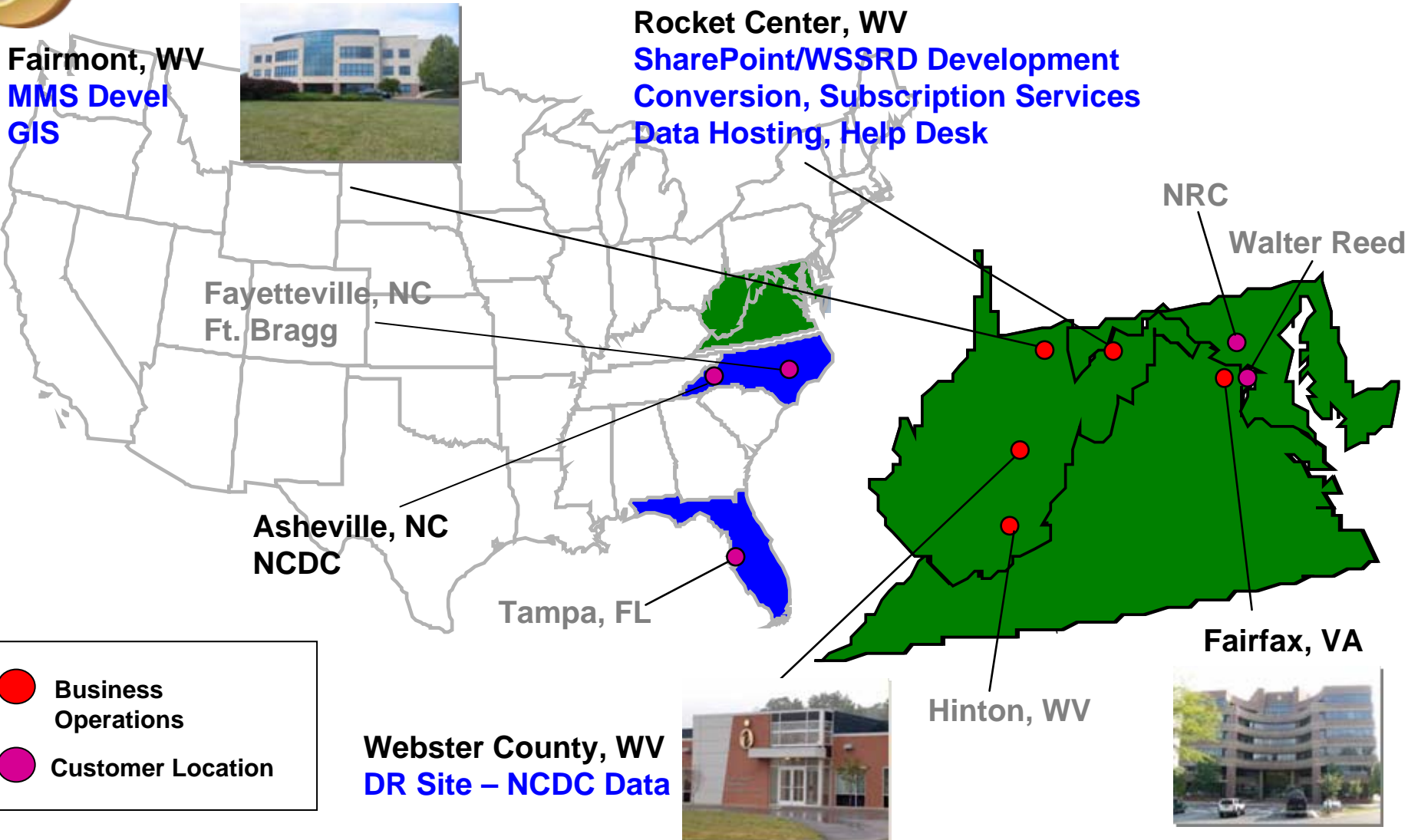
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IMC Locations





Complete Software Development

IMC DEVELOPED APPLICATIONS

- EDADS (SharePoint customization)
- WSSRD
- MMS
- CATS
- DMARTS
- AskAFIP

TECHNOLOGY COMPETENCIES

- Enterprise Content Management (ECM)
 - Microsoft SharePoint
 - EMC Documentum
 - TowerTrim
 - Livelink
 - Alfresco
- Geographic Information Systems (GIS)
- Help Desk
- Database design and management
- System accreditation and certification
 - DIACAP/DITSCAP
 - NIST 800 series, NISPOM
- Web portal development
- Computer forensics
- Portable Document Format (PDF)

OPERATING ENVIRONMENTS

- Microsoft
- UNIX / LINUX
- VMware

DEVELOPMENT

- VB, C#, .Net
- Java
- Cold Fusion
- C, C++
- Open Source solutions

DATABASES

- Microsoft SQL
- Oracle
- MySQL

CREDENTIALS

- Microsoft RM3P - Records Management Preferred Partner Program (1 of 5 partners)
- HP Reseller

“BEST-IN-INDUSTRY” PRACTICES

- SEI Partner (only 157 in U.S.)
- CMMI® Level 2+
- Linear and iterative development models
- Virtual (multi-site) development

STAFF CERTIFICATIONS

- PMP
- MCSA, MCP
- Cisco CCNA / CCDA
- CSTP
- CISSP / SSCP
- CTIA

NOAA Overview



1. Application Hosting
 - Online access to over 50 million records
 - 10+ TB of data
 - Subscription fulfillment
 - Help Desk support
2. Application Development
 - Website hosting
 - .Net, C#, Cold Fusion, J2EE
 - SharePoint 2007
 - MS SQL, Oracle
 - Windows, Unix
3. Fulfillment Processing
 - Subscription Management
 - 15,000+ subscriptions
 - Order fulfillment
 - 5 million + printed pages annually
 - Weekly and Monthly Publications
 - Financial Processing Support
 - Accounts receivable
 - Remittance processing
4. Conversion
 - Rare documents
 - Obsolete electronic media
 - Video tape and film conversion
 - GIS Processing



EDADS – SharePoint upgrade from WSSRD

- Upgrade to SharePoint 2007 started 2/1/2008
- All archived weather data should be moved and available in EDADS by Spring 2009
- Commercial Product backed by Microsoft
- Large base of SharePoint installations and users
- Highly customizable – features may be easily extended
- Allowed us to customize an interface similar to WSSRD
- Cooperative Observations collection currently available
- A platform that can be used in the future to extend Records Management capability at NCDC
 - Integrates with Microsoft Office
 - Customizable workflows allowing documents to be created in Office and routed for approval or review
 - Provides a central repository for documents



EDADS – Search Screen

Environmental Document Access and Display System

Welcome Paul E. Fisher ▾

Environmental Document Access and Display System

[Home](#) [Libraries](#) [Search](#)

Surface Weather Observations (SWO) Advanced Search

<input type="radio"/> BATCH NAME:	Equal to	<input type="text"/>	<input type="checkbox"/> Wildcard
<input type="radio"/> STATION NAME:	Equal to	<input type="text"/>	<input type="checkbox"/> Wildcard
<input type="radio"/> STATE:	Equal to	<input type="text"/>	<input type="checkbox"/> Wildcard
<input type="radio"/> DATE:	Equal to	<input type="text"/>	<input type="checkbox"/> Partial Date
<input type="radio"/> WBAN:	Equal to	<input type="text"/>	<input type="checkbox"/> Wildcard
<input type="radio"/> FORM TYPE:	Greater than or equal to	<input type="text"/>	<input type="checkbox"/> Wildcard
<input checked="" type="radio"/> DOCUMENT ID:	Less than or equal to	<input type="text"/>	
<input type="radio"/> ASSOCIATED DOCUMENT ID:	Between	<input type="text"/>	
	Less Than Value 1 or Greater Than Value 2	<input type="text"/>	
	Is Null	<input type="text"/>	
	List Builder	<input type="text"/>	

Sort Direction:

▲ASCENDING

▼DESCENDING

Combine Fields By:

AND

OR

[Search](#) [Reset Form](#) [Standard Search Mode](#)



MMS: Background and Goals

- Multi-Network Metadata System
- Integrate, enhance & increase access
- Initial focus: manage NCDC's station histories
- Accommodate broad variety of station details
 - Identity
 - Location
 - Location Mapping
 - Instrumentation
 - Observing practices
 - Data Programs & Products
 - Management
 - Photos & Document images
- Track information source & log changes
- Adapt to new observing systems, data programs and phenomena without recoding
- Hooks to incorporate data inventories

Shoreline Vectorization and Access to Coastal Data



Georeferenced Image

2008 Accomplishments

- 998 T-Sheets georeferenced
- 961 T-Sheets vectorized
- 246 Bessel Ellipsoid T-Sheets researched
- 234 Bessel Ellipsoid T-Sheets transformed and sent to QC
- 759 FGDC compliant metadata records written
- 39 Image Requests totaling 1,044 images

Remaining Work

- 637 T-Sheets in need of Georeferencing
- 976 Bessel Ellipsoid T-Sheets in need of Transformation to NAD83
- 3,142 T-Sheets in need of Vectorization
- 2,072 T-Sheets in Vectorization QC Process



Vectorized Lines Added



Polygons Added



Conversion & Digitization Capabilities

FORMATS

- Bound or unbound paper
- Large format material
- Microfiche, roll film
- VHS tapes
- Aperture cards
- X-rays
- Medical tissue slides
- Kodachromes (film slides)
- Fingerprint cards
- Tapes and electromagnetic media
- Historical documents (fragile)
- Photos, negatives
- CD's, floppies, and electronic documents
- Book scanning

SUPPORTING CAPABILITIES

- Warehousing
- Truck Fleet
- Document Destruction
- R&D Lab (CTRL)
- Section 508 Remediation
- Optical Character Recognition
- Metadata tagging
- TOP SECRET data processing

CREDENTIALS

- 5 USC § 552a (Privacy Act) trained processing staff
- HIPAA trained processing staff



Conversion

- 975,000 images delivered to NOAA during 2008 to date, 750,000 accepted by NOAA
- Conversion Process
 - Document Preparation
 - Scanning
 - Indexing
 - Image Enhancement
 - Optical Character Recognition

*Throughout the conversion process, we apply stringent quality control and quality assurance practices to ensure the highest accuracy rates. Higher accuracy rates mean less reprocessing and lower costs.



Summary

IMC can support NCDC

- Development of new systems to host data (EDADS, MMS, WSSRD)
- Data Hosting in a secure facility
- Disaster Recovery (COOP) facilities
- Document (or other physical media) Capture
- GIS projects



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Questions/Discussion