NOAA Command and Data Acquisition Station

GOES DCS Architecture

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Wallops CDAS
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NOAA Satellite and Information Service
National Environmental Satellite, Data, and Information Service (NESDIS)
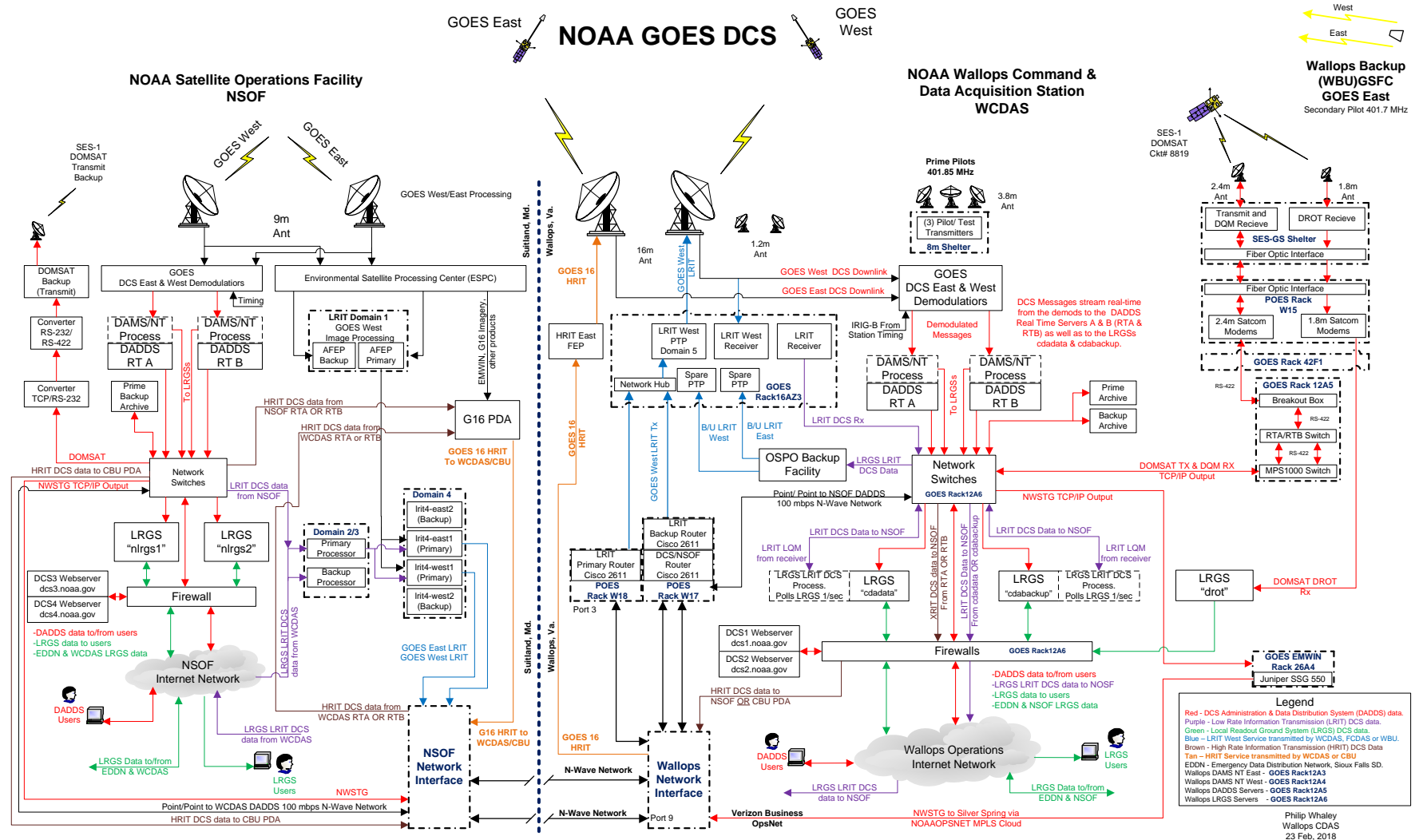
DCS (GOES Data Collection System)

- DCS receives a combined 34K messages an hour from our GOES-16 (East) and GOES-17 (West) satellites.

- DCS has several different mechanisms for data retrieval provide by NOAA.
  - DADDS (DCS Administration and Data Distribution System)
  - NWSTG (National Weather Service Telecommunication Gateway)
  - DOMSAT (Service ending 14 May, 2019)

  - LRGS (Local Readout Ground System)
  - HRIT (High Rate Information Transmission)

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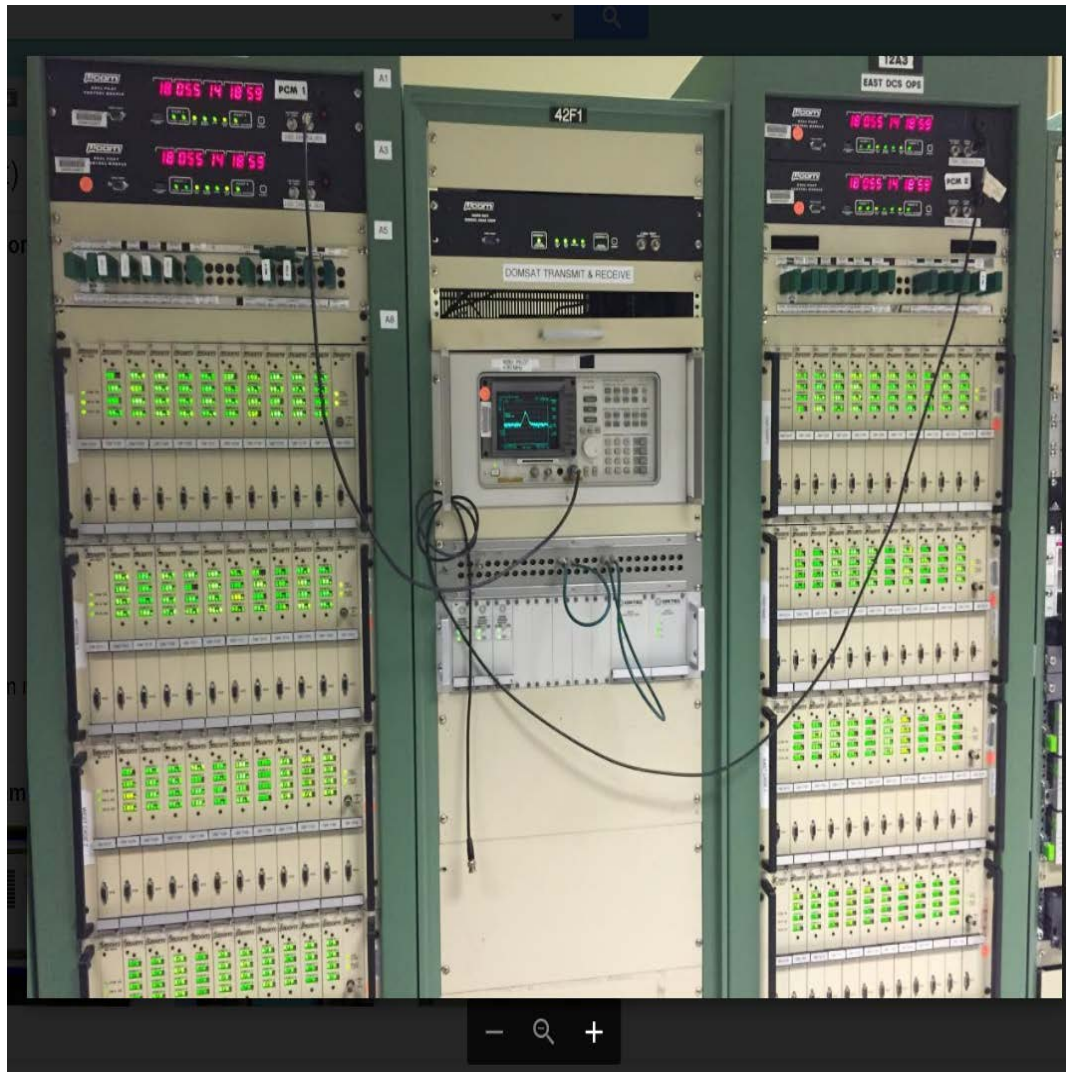
How Do We Get All of the Messages?

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The Demods and DCPMs'

The Servers

LRGS Information

LRGS Information

LRGS Summary Status

UTC: April 12, 2019 17:10:15 (Day 102)

| Host Name	Status Time	LRGS Status	Primary Downlink Status	Primary Quality Last Hour	Aggregate Quality Last Hour	Msgs This Hour	Num DDS Clients	Cove LRGS Version
cdadata.wcda.noaa.gov	04/12 17:10:01	OK	DRGS:Active	99.65%	99.65%	5994	100	9.1
cdabackup.wcda.noaa.gov	04/12 17:10:04	OK	DRGS:Active	99.65%	99.65%	6025	57	9.1
cdadrot.wcda.noaa.gov	04/12 17:09:55	OK	DOMSAT:Active	99.73%	99.73%	5890	2	9.1
nlrgs1.noaa.gov	N/A	No Response	null:(none)	0%	0%	0	0	?
nlrgs2.noaa.gov	N/A	No Response	null:(none)	0%	0%	0	0	?
lrgseddn1.cr.usgs.gov	04/12 17:10:10	OK	DDS:Active	99.66%	99.66%	6095	84	9.1
lrgseddn2.cr.usgs.gov	04/12 17:10:09	OK	DDS:Active	99.64%	99.64%	6381	70	9.2
lrgseddn3.cr.usgs.gov	04/12 17:10:08	OK	DDS:Active	99.66%	99.66%	6068	31	9.1

LRGS Servers

- There are several LRGS Servers. They are at different locations across the country.

cdadata.wcda.noaa.gov
cdabackup.wcda.noaa.gov
cdadrot.wcda.noaa.gov
nlrgs1.noaa.gov
nlrgs2.noaa.gov
lrgseddn1.cr.usgs.gov
lrgseddn2.cr.usgs.gov
lrgseddn3.cr.usgs.gov

LRGS Monitoring GUI
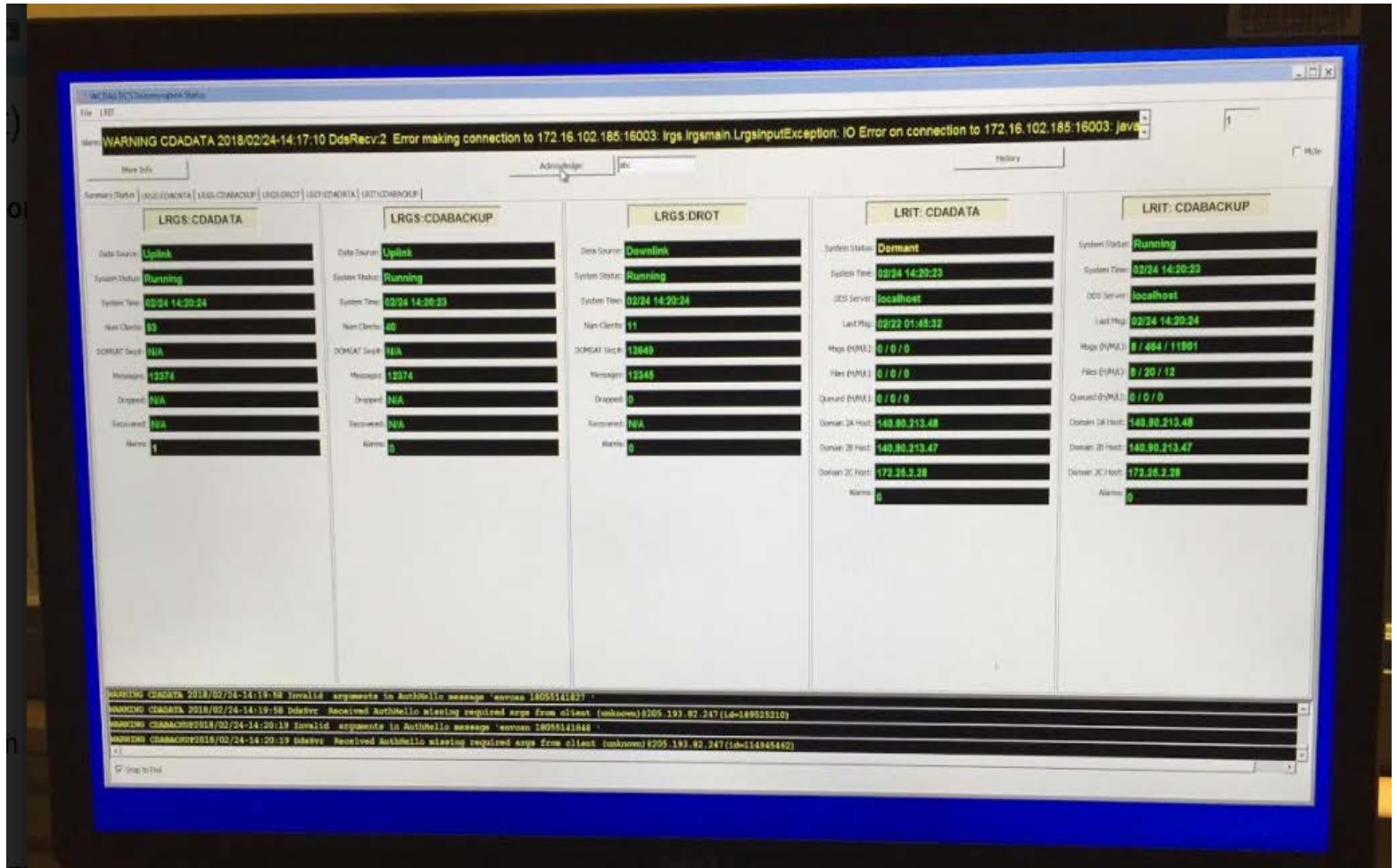
User Account Setup

- Call a DCS operator at 757-824-7450 to begin the process for account set up.

- Have available the following:
  - Name
  - Email Address
  - Organization
  - Telephone Number
  - Preferred 6-character user name

Important Note

- Your DADDS account and your LRGS account are different.

- DADDS and LRGS are two separate systems and the usernames are not interchangeable.

User Account Set Up

- Must be a unique username.
  - We will check to see if you username is available.
  - Currently, once you establish your password there is no requirement to change it.
  - Once your account is established, it will be immediately available on CDADATA. Your credentials will propagate to the other LRGS machines within 30 minutes.

Password Convention

- An initial password is generated by a GUI interface located at Wallops.

- The DCS operator will provide your new password over the phone.

- You may choose to keep this password or change it at you leisure.

- IT security requirements will not let us email you the password at this time.

Password Convention

- **NOAA CITR-021 Password Requirements**
  - Passwords must contain at least 12 non-blank characters
  - Password must contain 3 of the following four character classes: upper case letters, lower case letters, digits, special characters.
  - Passwords cannot contain the user name or any dictionary word or acronym that is 5 characters or longer
  - When changing a password, you cannot reuse any of the last 8 passwords, or any password that was set in the past 2 years.

Password Convention

- Users can change their passwords if so desired.

- The instructions are found in the Client User Guide provided on the download page.

- Additionally, we cannot see your password once it has been initially created. If you forget, you will have to call the Wallops DCS help desk to have a new one created.
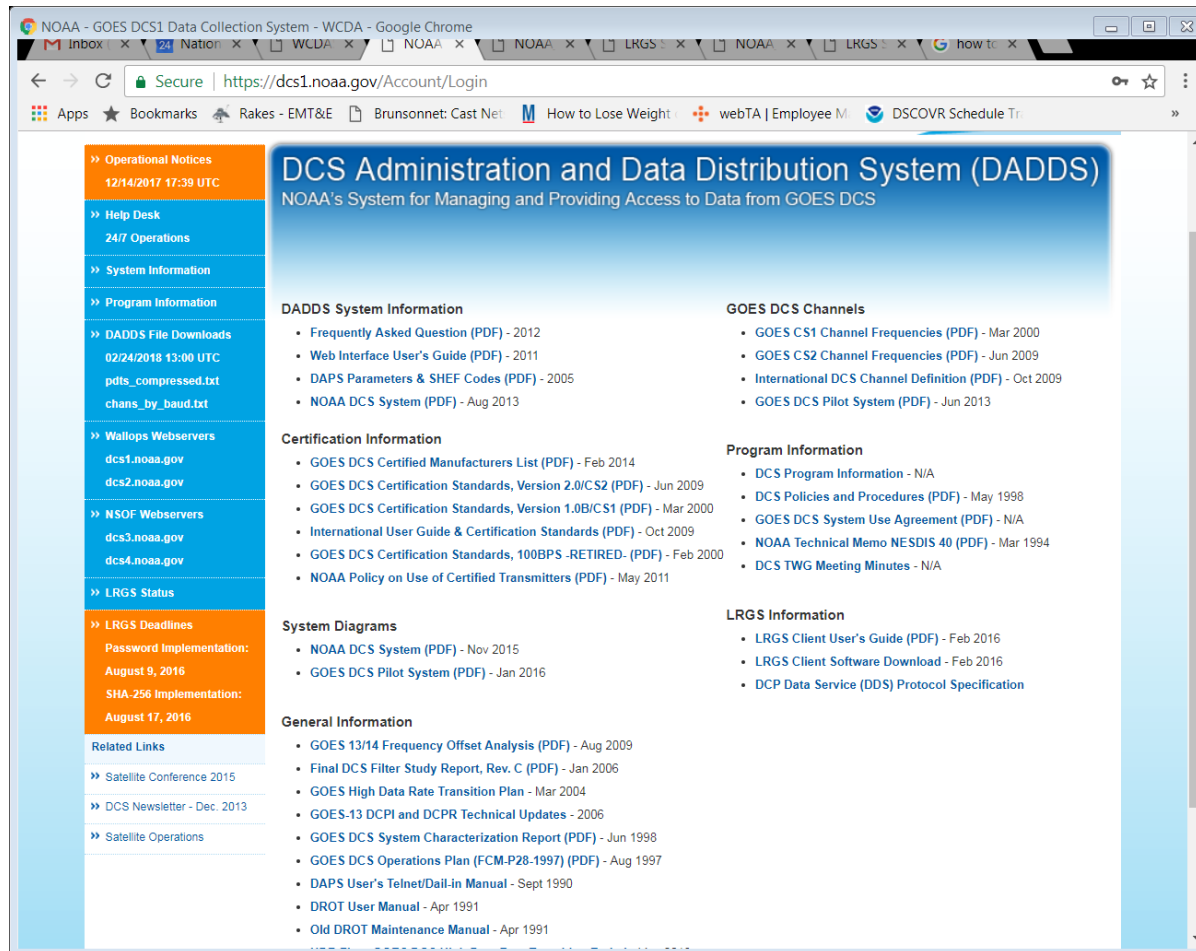
Downloads

- You do not need to login to your DADDS account to download the client

- Go to our web page for the download link

- DCS1.NOAA.gov, DCS2.NOAA.gov

- Download the user manual first and read the particulars for your particular application

- Download the client software

LRGS Downloads

LRGS Downloads

GOES CS2 Channel Frequencies (PDF) - Jun 2009
International DCS Channel Definition (PDF) - Oct 2009
GOES DCS Pilot System (PDF) - Jun 2013

Program Information
- DCS Program Information - N/A
- DCS Policies and Procedures (PDF) - May 1998
- GOES DCS System Use Agreement (PDF) - N/A
- NOAA Technical Memo NESDIS 40 (PDF) - Mar 1994
- DCS TWG Meeting Minutes - N/A

LRGS Information
- LRGS Client User's Guide (PDF) - Feb 2016
- LRGS Client Software Download - Feb 2016
- DCP Data Service (DDS) Protocol Specification

LRGS Support

- Wallops has very limited support for LRGS

- It's a free OpenDCS suite developed to give users another option for data retrieval.

- At Wallops we issue passwords for the system, keep the interface servers running and ensure DCS data is flowing to the LRGS's.

LRGS Support

- Wallops staff does not help with installation of the client software. We provide a secure download of the latest client and user guides.

- Users should coordinate with their system administrator for installation help.

LRGS Support

- If you have detailed LrgsClient questions, contact Cove Software, LLC for specific application support. Cove's phone number is listed in the last page of the user manual.