



Operational Concept of the SEEFFG System

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**South East Europe Flash Flood Guidance (SEEFFG) System
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World Meteorological Organization
(WMO)



Hydrologic Research Center
(HRC)

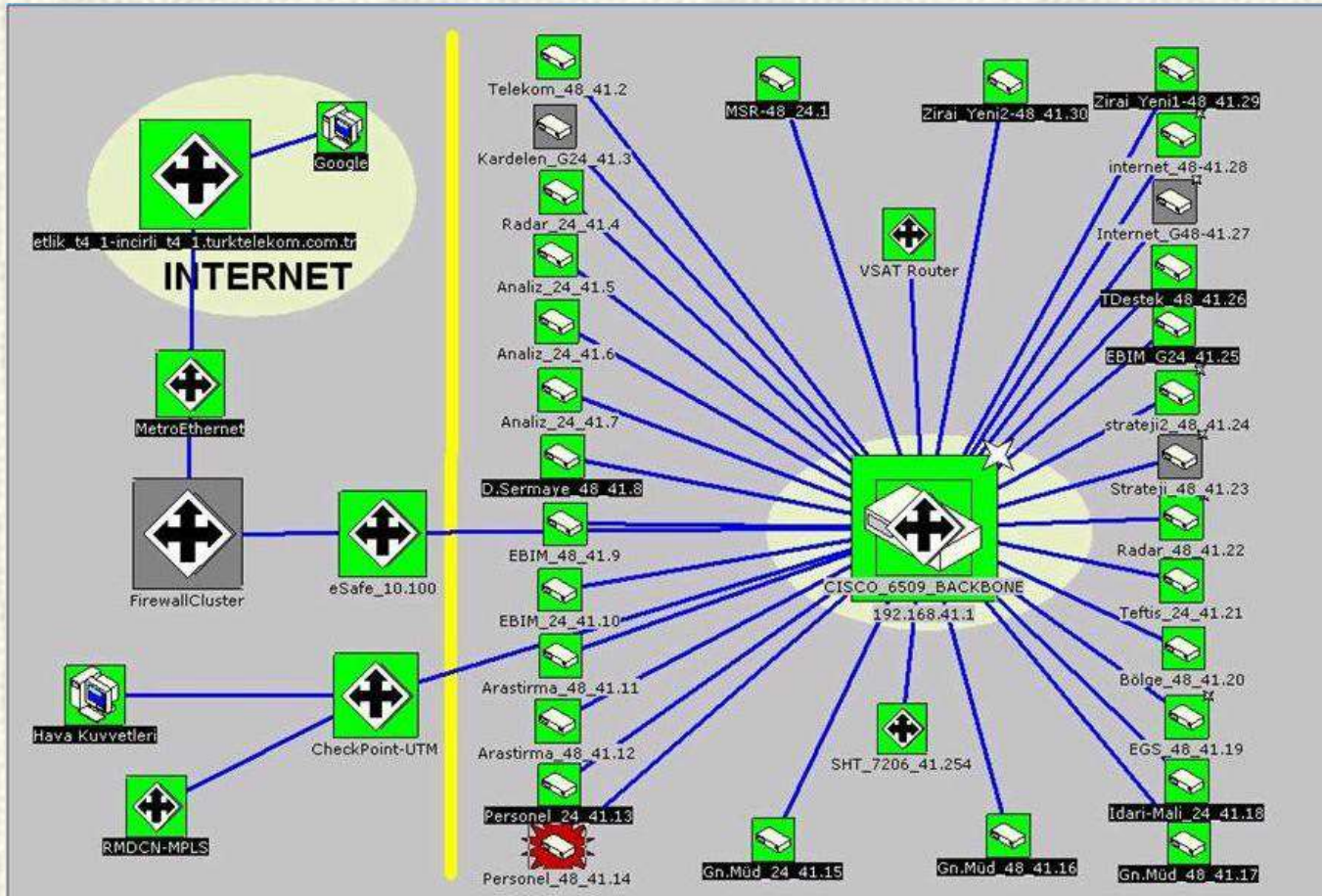


National Oceanic and Atmospheric
Administration (NOAA)



U.S. Agency for International
Development (USAID)

Overview of the servers



TSMS Network includes:

- ✓ CISCO Backbone,
- ✓ 31 Edge Switch,
- ✓ 20 Servers, including BSMEFFGS and SEEFFGS servers



BSMEFFGS & SEEFFGS Server Configuration



Brand	HP Proliant DL380
CPU	Intel Xenon i7 E5-2620
Processor clock speed	2.0 GHz
CPU cores	6
Hard disk capacity	7.5 TB
RAM	32 GB (2x16GB Registered DIMMs, 2133 MHz)
Operating system	LINUX, Centos release 7
GPU	Matrox MGS G200EH graphic card support

BSMEFFGS and SEEFFGS servers have the same configurations.

Each system has 2 servers;

- Computation Server
- Dissemination Server



Computational Server



Computation server;

The computational core at the RC runs

- ✓ meso-scale meteorological models,
- ✓ high resolution hydrologic model for the region that produce various diagnostic indices, forecast of precipitation, soil water deficit and FF potential for small streams on the basis of global meteorological model forecasts, satellite estimates of precipitation with high resolution and short latency and real time operational rain gauge and surface weather station reports. (HRC Tech. Note 53)

- ✓ To compute the FFG, it is necessary to estimate the soil water deficit for each of small basins and the storage in the channel network up to the bankfull flows.
- ✓ When these two storages are filled for a small basin under continuing rain, then there is high potential for FF development.(HRC Tech. Note 53)



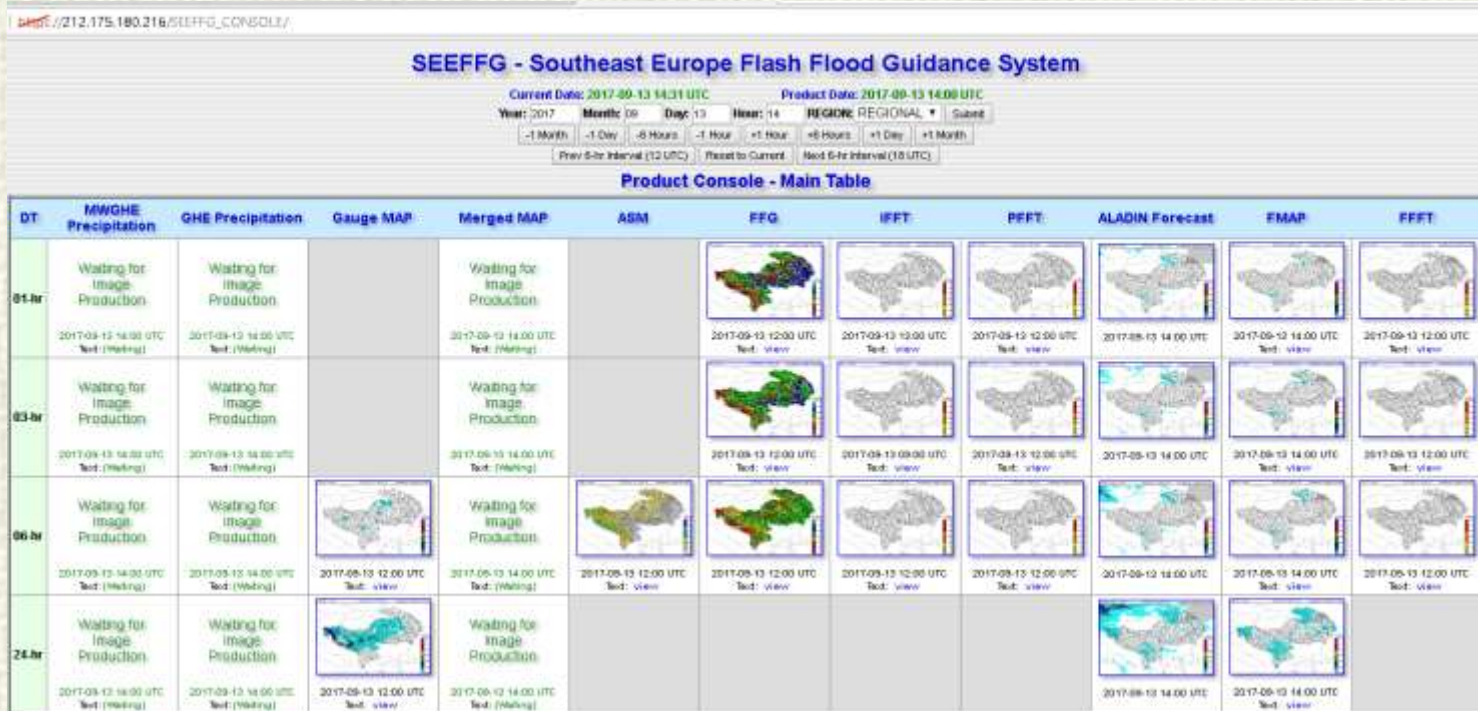
Dissemination Server



Dissemination server;

- ✓ The FFGS is primarily responsible for all data acquisition, pre-processing, model processing. After the FFGS has completed these processes, the resulting products are disseminated.
- ✓ SEEFFG dissemination server allows additional post-processing to authorized users for not only real-time, but also previous historical products through a secure web interface.
- ✓ All authorized users can log in to dissemination server to access the SEEFFG products.

Access to SEEFFGS User Interface Console



SEEFFGS is now running on TSMS servers.

In order to access SEEFFGS user interface console, users enter the web address

https://212.175.180.216/SEEFFG_CONSOLE

https://212.175.180.216/SEEFFG_DASHBOARD



Operational System Maintenance (1)



OPERATIONAL SUSTAINABILITY

Hydrometeorological
Forecasts

Information
Technology (IT)
Administrators

Running appropriately?

Intervention?

Problems?

SYSTEM REVIEW

Operational System Maintenance (2)





Operational System Maintenance (3)



2017-09-20 10:08:33 EET 2017-09-20 08:08:33 UTC

SEEFFG Real-Time Status Dashboard

Image Products

GHE - 01 hr 2017-09-20 07:00 UTC Southeast Europe Regional

Area: 01-hr Tot. Precip - 24 Images - (Pop-Up Window)

Status - 06 hr 2017-09-20 1:00 UTC Southeast Europe Regional

Area: No Available Analysis for this Time

ASM - 06 hr 2017-09-20 06:00 UTC Southeast Europe Regional

Area: 06-hr ASM - 24 Images - (Pop-Up Window)

PTG - 06 hr 2017-09-20 06:00 UTC Southeast Europe Regional

Area: 06-hr PFG - 24 Images - (Pop-Up Window)

Real-Time Data Download and Inventory Status

HRC MWGHE Download					NESDIS GHE Download					GAGE Data Download					DHMZ ALADIN Download					TSMC ALADIN Download				
ENABLED					ENABLED					ENABLED					ENABLED					ENABLED				
SUCCESS					SUCCESS					SUCCESS					SUCCESS					SUCCESS				
Sep-16	Sep-17	Sep-18	Sep-19	Sep-20	Sep-16	Sep-17	Sep-18	Sep-19	Sep-20	Sep-16	Sep-17	Sep-18	Sep-19	Sep-20	Sep-16	Sep-17	Sep-18	Sep-19	Sep-20	Sep-16	Sep-17	Sep-18	Sep-19	Sep-20
100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%

Real-Time Data Processing Status

HRC MWGHE Data Processing					NESDIS GHE Data Processing					GAGE Data Processing					DMS Data Processing					ALADIN Data Processing				
ENABLED					ENABLED					ENABLED					ENABLED					ENABLED				
PENDING					SUCCESS					SUCCESS					SUCCESS					PENDING				

Model Processing Status

SNOW Model Processing					SACSMA & FFG Model Processing					Text/CSV Exports					Image Exports				
ENABLED					ENABLED					ENABLED					ENABLED				
SUCCESS					SUCCESS					SUCCESS					SUCCESS				

Export Processing Status

Computational Server Status

General Info				Processing Load				CPU Activity				Disk Activity				Storage			
IP Address	Hostname	Uptime	Active Logins	1-Min	5-Min	15-Min	Swap Used	User	System	IOwait	Idle	Read	Write	Free	Used	% Used	Days to Filled		
192.175.180.201	SEEFFG-01	64:30 days	0	36.31%	33.22%	13.96%	100.00 MB	1	99.99%	0.00%	99.98%	4.012 MB	140.191 MB	1,707,520 MB	79,317 MB	9%	189 days		

Dissemination Server Status

General Info				Processing Load				CPU Activity				Disk Activity				Storage			
IP Address	Hostname	Uptime	Active Logins	1-Min	5-Min	15-Min	Swap Used	User	System	IOwait	Idle	Read	Write	Free	Used	% Used	Days to Filled		
192.175.180.204	SEEFFG-04	61:40 days	0	10.00%	12.44%	10.82%	0 MB	1	99.99%	0.00%	99.98%	3.521 MB	118.363 MB	1,707,520 MB	81,303 MB	5%	131 days		

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Go to Southeast Europe Regional Product Console



Thank you

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