Emergency Web Service (EWS) Guidelines for Use

This document provides guidelines for using the Emergency Web Service (EWS) provided to University System of Georgia (USG) institution or participant organizations through Information Technology Services (ITS). It serves as reference and is intended for use by USG EWS authorized support contacts and ITS personnel.

Definitions

Emergency

ITS defines an emergency as an unplanned event that results in loss of access to a USG institution or participant organization's primary website. Further definition and clarification include:

- A non-routine campus closing that involves electrical power, a local area network, security issue, or the institution or participant organization's data center resulting in an institution or participant organization's Web server or service outage
- A protracted, catastrophic failure of an institution or participant organization's Web server or service lasting 24 or more continuous hours.
- A planned event involving ITS in the institution or participant organization's planning process–lasting 24 or more continuous hours.

Domain Name System (DNS)

ITS' Emergency Web Service is controlled by the Domain Name System (DNS). DNS is a general-purpose distributed, replicated, data query service mainly used on the Internet for translating hostnames (www.usgwebsite.edu) into Internet addresses (123.45.67.890).

DNS is not a centrally managed service. It is a hierarchical and distributed service running on literally millions of DNS servers managed by independent staff and organizations around the world. DNS servers are continually asking each other for updated information (i.e., what IP address is associated or assigned to what logical Web service name). In addition, the servers are programmed to remember (a.k.a. caching) any information they learn for a specified period of time (e.g., 48-hours, one-week, etc.).

Because DNS is distributed and DNS servers remember information for a period of time before asking again, there is no way to effect a guaranteed real-time activation of the EWS. However, in order to help ensure that EWS can be activated and deactivated relatively quickly, ITS programmed its DNS servers to request that all other DNS servers throughout the world only remember the addresses for a USG institution or participant organization's main Web server for no longer than 20 minutes

Note: This time span is also known as "Time to Live" or TTL. Consequently, all Web-browsing customers should notice an activation of EWS within 20 minutes of ITS making a DNS change (e.g., for the purpose of activating EWS).

There are two caveats:
- Some Web-browsing customers will notice EWS activation or deactivation before other customers. This is normal and is a result of the distributed nature of DNS as described above
- ITS expects problems to be the exception rather than the rule. However, because DNS is a decentralized service, there is no guarantee that all Web-browsing customers will notice EWS activation or deactivation within a specific and reasonable period of time. If problems occur, it is likely the result of (1) transient network connectivity issues or (2) improperly configured and/or independently operated DNS servers

Prerequisites

Technical

- The ITS DNS service must provide either Primary or Secondary DNS service for a participating USG institution or participant organization. *Note: EWS is available only if ITS provides either Primary or Secondary DNS service for a USG institution or participant organization. ITS name servers should also be registered with EDUCAUSE*

- To establish Primary or Secondary DNS service for an institution or participant organization that does not have this in place, the institution or participant organization can contact the ITS Helpdesk and request the service
- If ITS provides Primary DNS service, ITS controls the Time to Live (TTL) value. TTL for participating institution or organization's standard www.* record is 20 minutes
- It is recommended that institutions or participant organizations managing their own DNS service (with ITS acting as a Secondary) set the TTL value of their www.* record to an appropriately short value so that customers will notice any activation or deactivation of EWS within a reasonable amount of time. ITS recommends 20 minutes.
- Emergency Web directories on the USG production server will provide each participating institution or participant organization with a single, branded page for information related to an emergency situation.

Enrollment

To enroll a USG institution or organization in EWS, please follow these steps:

1. Designate an institution or organization representative(s) to request EWS. Institution or organization representatives will be added to the ITS EWS contact spreadsheet.
   Note: CIO council members are considered institution representatives and are already entered on the EWS contact spreadsheet for the purposes of requesting EWS assuming all other technical and enrollment requirements for EWS are met.
   - To designate alternate representative(s) authorized to request EWS on behalf of the institution or participant organization, change an existing institution or participant organization representative (name), or change profile (contact) information for an existing institution or organization representative, we request the CIO contact the ITS Helpdesk and provide the following information for each individual:
     - Institution or Organization Name
     - First Name
     - Last Name
     - Email address
     - Telephone number
     - Alternate telephone, cell phone number available 24 hours 7 days a week
2. Verify that ITS is either Primary or Secondary for your institution or participant organization's main www.* domain records. To establish Primary or Secondary DNS service for an institution or participant organization that does not have this in place, the institution or participant organization may contact the ITS Helpdesk and request the service
3. If an institution or participant organization is managing its own main www.* domain records, verify a sufficiently short TTL value on the institution or participant organization's DNS server. ITS recommends 20 minutes for EWS

Request Emergency Web Services

Authorized Contacts

The following positions, roles, and/or individuals may contact ITS to request EWS:

- Chief Information Officer (CIO or Alternate CIO as designated by the institution or participant organization). These individuals may request EWS as defined above)
- Representatives designated by the chief information officer who can invoke EWS can include, but are not limited to, information security officers and/or their designated alternates, public relations officer or other institution or participant organization spokesperson, public safety director, or security director

Note: When contacted by an institution or participant organization employee not identified in our database as an authorized EWS contact, the ITS Helpdesk will initiate a telephone callback to verify identity and confirm authorization to implement EWS for the institution or participant organization's primary website.

Information Required from the Institution or Participant Organization

When contacting ITS and requesting EWS for the institution or participant organization's primary website, the authorized contact will be requested to provide the following information that will be used to populate the emergency Web page:

- Institution or participant organization contact information (Optional)
- Links (Optional, 2 maximum)
- Narrative announcement (**Required**)
- Start date (**Required**)
- Stop date (Optional. If not provided by the institution or participant organization, the need for emergency Web service will be reevaluated by ITS after 72 continuous hours of service implementation. ITS will attempt to contact an institution or participant organization's information security officer or CIO. (If contact cannot be established to confirm service need, and if it is determined by ITS that the service is no longer needed, ITS will restore the institution or participant organization's primary Web service DNS.)
- The primary URL for the institution or participant organization's primary website (**Required**)
- Aliases or alternate names for the institution or participant organization's primary website URL (Optional)

Frequently Asked Questions

Question 1:   What impacts the time to change and how long should it take to *activate* EWS?

Answer 1:   After receiving the request from an institution or participant organization, ITS will attempt verification of the EWS request back to the institution or participant organization. Assuming technical requirements are met and verification accomplished, the ITS Helpdesk will open a USG ServiceNow Incident to manage the life of the request to include setting up EWS page content, testing and verification from the institution or participant organization for content accuracy, and notifying ITS System Support to activate the DNS change. Customers should notice a switch to EWS within 20 minutes of DNS activation, or in the case of an institution or participant organization managing its own DNS service, within the amount of time specified by the TTL value associated with the institution or participant organization's www.* record. Because of the decentralized caching nature of DNS, some customers will notice an activation of EWS sooner than other customers, but all customers should notice the change within 20 minutes after the change.

Note: For a planned event—proactively involving ITS in the institution or participant organization's planning process—implementation time can be reduced because selected event/actions described above can be accomplished before DNS change activation.

Question 2:   What impacts the time to change and how long should it take to *deactivate* EWS?

Answer 2:   Turning EWS on (activation) and turning EWS off (deactivation) are basically the same thing. Therefore the timeline explanations provided in Question 1/Answer 1 apply to deactivation.

Contacting the ITS Helpdesk

For information regarding EWS procedure, activation/de-activation, policies, or acceptable use, contact the ITS Helpdesk:

- Hours of Operation: Monday–Friday, 8 a.m.–5 p.m.
- Self-Service Support Request: http://www.usg.edu/customer_services (requires user ID and password)
- 706-583-2001 or 1-888-875-3697 (toll free within Georgia)
- helpdesk@usg.edu