

This document provides guidelines for using Emergency Web Services (EWS) provided to University System of Georgia (USG) institutions through the Office of Information and Instructional Technology (OIIT). It serves as reference and is intended for use by USG EWS authorized support contacts and OIIT personnel.

## Definitions

### *Emergency*

OIIT defines an emergency as an unplanned event that results in loss of access to a USG institution primary web site. Further definition and clarification include the following:

- A non-routine campus closing that involves electrical power, a local area network, security issue, or the institution's data center resulting in an institution's web server or service outage.
- A protracted, catastrophic failure of an institution's web server or service lasting 72 or more continuous hours.
- A planned event—involving OIIT in the institution's planning process—lasting 72 or more continuous hours.

### *Domain Name System (DNS)*

OIIT's EWS 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 some 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 OIIT's EWS. However, in order to help ensure that OIIT's EWS can be activated and deactivated relatively quickly, OIIT programmed its DNS servers to request that all other DNS servers throughout the world only remember the addresses for a USG institution'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 OIIT 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.
- OIIT 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 an EWS activation or deactivation within a specific and reasonable period of time. If problems occur, they will likely be the result of (1) transient network connectivity issues or (2) improperly configured and/or independently operated DNS servers.

## Prerequisites

### *Technical*

- The OIIT DNS service must provide either master or secondary/slave DNS service for a participating USG institution. *Note: EWS is only available if OIIT provides either master or slave DNS service for a USG institution. OIIT nameservers should also be registered with Educause.*
- To establish master or secondary/slave DNS service for an institution that does not have this in place, the institution can contact the OIIT Helpdesk and request the service.
- If OIIT provides master DNS service, OIIT controls the Time to Live (TTL) value. TTL for participating institution's standard www.\* records is 20 minutes.

- It is recommended that institutions mastering their own DNS service (with OIIT acting as a slave) 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. OIIT recommends 20 minutes.
- Emergency web directories on the USG production server will provide each participating institution with a single, branded page for information related to an emergency situation.

### **Enrollment**

To enroll a USG institution in OIIT's EWS, please follow these steps:

1. Designate an institution representative to request EWS. Institution representatives will be entered into OIIT's case management system.

*Note: USG Administrative Committee on Information Technology (ACIT) members are considered institution representatives and are already entered into OIIT's case management system for the purposes of requesting OIIT's EWS assuming all other technical and enrollment requirements for EWS are met.*

- To designate an alternate institutional representative authorized to request EWS on behalf of the institution, change an existing institution representative (name), or change profile (contact) information for an existing institution representative, the CIO should contact the OIIT Helpdesk and provide the following information for each individual:
    - Institution Name
    - First Name
    - Last Name
    - E-mail address
    - Telephone number
    - Alternate telephone, cell phone, or pager number (optional)
2. Verify that OIIT is either master or slave for your institution's main www.\* domain records. To establish master or secondary/slave DNS service for an institution that does not have this in place, the institution may [contact the OIIT Helpdesk](#) and request the service.
  3. If an institution is mastering its own main www.\* domain records, verify a sufficiently short TTL value on the institution's DNS server. OIIT recommends 20 minutes for EWS.

### **Request Emergency Web Services**

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

- Chief Information Officer (CIO or Alternate CIO as designated by the institution). These individuals may request EWS as defined above).
- An institution representative as designated by the CIO to include, but not limited to, ACIT member, Responsible Cybersecurity Officer (RCO), Alternate RCO, Public Relations Officer or official, Public Safety Director, Security Director, and/or institution spokesperson. These individuals may request EWS as defined above, or requests made through these position/roles can be limited in scope as determined by the CIO.

*Note: When contacted by an institution, or by a request submitted through the OIIT Website Service Request Form (Refer to Contacting OIIT section), the OIIT Helpdesk agent will attempt to initiate a telephone callback to verify identity and confirm authorization to implement EWS for the institution's primary website.*

### **Information Required from the Institution**

When contacting OIIT and requesting EWS for the institution's primary website, the RCO, CIO, or designated alternate, will be requested to provide the following information that will be used to populate the emergency web page:

- Institution contact information (Optional)
- Links (Optional, 2 maximum)

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

## Frequently Asked Questions

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

**Answer 1:** After receiving the request from an institution, OIIT will attempt verification of the EWS request back to the institution. Assuming technical requirements are met and verification accomplished, OIIT's Frontline Helpdesk will open a case management system record to manage the life of the request to include setting up EWS page content, testing and verification from the institution for content accuracy, and notifying OIIT's 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 mastering its own DNS service, within the amount of time specified by the TTL value associated with the institution'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 OIIT in the institution'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* OIIT's 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.

## Support and Contacting the OIIT Helpdesk

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

- Hours of operation: Monday–Friday, 8:00 a.m.–5:00 p.m.
- Address: 2500 Daniells Bridge Road, Building 300, Athens, GA 30606
- Self-Service Request Form: [http://www.usg.edu/customer\\_services](http://www.usg.edu/customer_services)
- Telephone: (888) 875-3697 (toll free within Georgia)
- Fax: (706) 583-2294
- E-mail: [Helpdesk@usg.edu](mailto:Helpdesk@usg.edu)
- Emergency (production down) after-hours (24/7) support notification is available by telephone.