



**VIRGINIA EMERGENCY  
RESPONSE TEAM**

# WebEOC State of the Union

*07/29/2014*



## INTRODUCTION

Since 2005, WebEOC (*Web Emergency Operations Center*) has been the Crisis Information Management System (*CIMS*) application for the Virginia Department of Emergency Management (*VDEM*) and the Virginia Emergency Response Team (*VERT*). The application has given the Commonwealth the ability to share information, provide situational awareness and coordinate missions amongst localities, State Agencies, Federal Agencies and Private Partners. Over the years, the application has evolved and become more sophisticated, but has maintained its core function of providing real-time information access and thus, has remained the standard for the Commonwealth of Virginia.

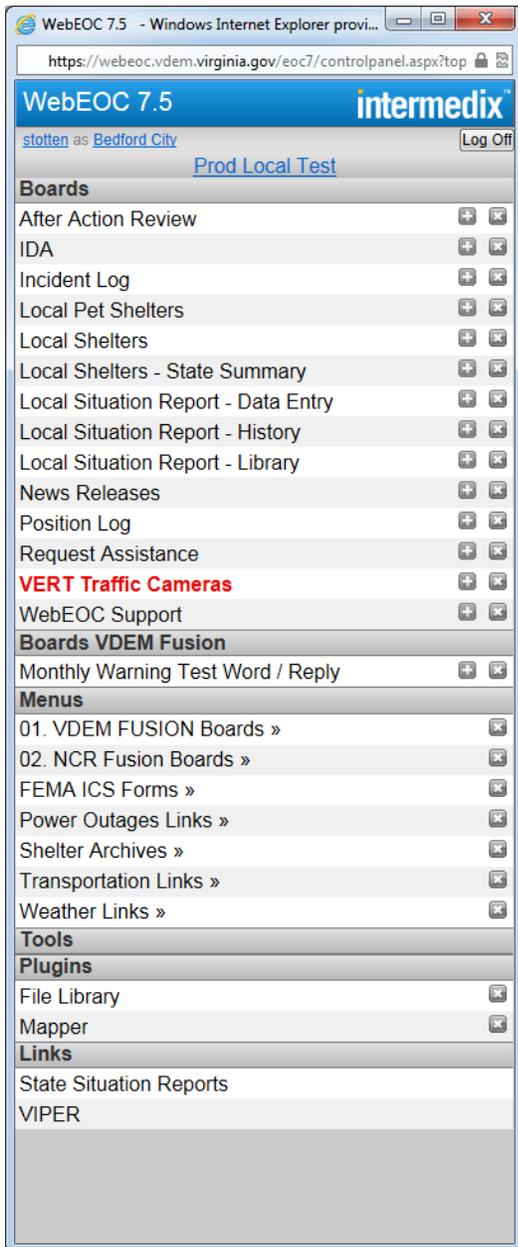
The following report will cover detailed changes, upgrades and advancements in WebEOC over the last two years and will give a brief synopsis of activities that are scheduled to come in the near future.

## WEBEOC CONTROL PANELS

The WebEOC control panel for the Commonwealth of Virginia has become more uniform between the numerous positions.

### Locality Control Panels

Locality positions have a control panel which is mostly identical for each locality, with a few additional items for various localities. These locality positions are tied to groups, which are what determine their board access within the control panel.



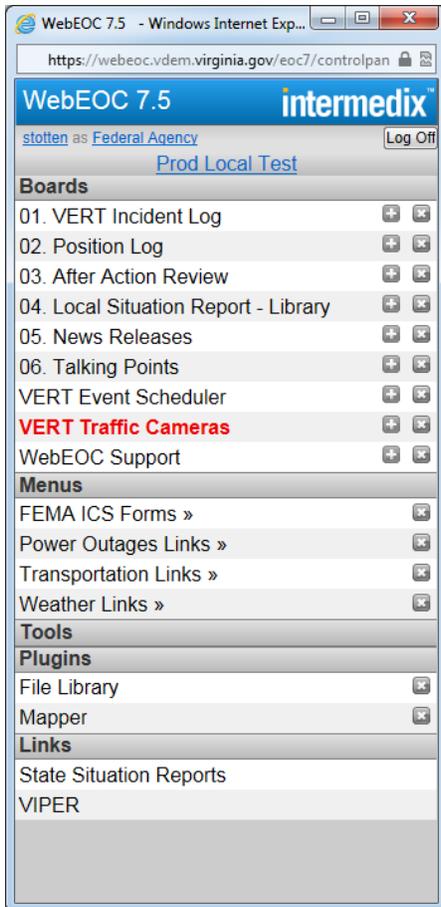

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*The picture shows an example of the basic localities access in WebEOC. Some localities will have additional items in their control panel, depending upon additional boards which they've been given access to.*

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## State Agency, VERT, Federal and Private Partner Control Panels

State Agency, VERT, Federal and Private Partner positions with the most similarities among them have been given a “Top 6” board list, along with access to 4 menu items, 2 plug-ins and 2 links, at minimum. As with the locality positions, these positions are also tied to groups that determine their board access within the control panel. Many of these users in WebEOC will have more access, depending upon the position(s) assigned to them; and users can also have access to multiple positions, if permissions allow.




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*The picture shows an example of the most basic access in WebEOC. Additional items in the control panel will vary, depending upon a user's position(s).*

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The re-structuring of the control panels in WebEOC was brought about to establish a base-level access structure for all positions. Subsequently, this gives way to providing additional board access to those positions that require it. This also creates a more common information sharing platform amongst the WebEOC users.

In addition to the groups currently used in WebEOC, those groups that were not being utilized in the system were eliminated, therefore streamlining the number of groups in WebEOC from almost 400 down to 194.

## WEBEOC BOARD CREATIONS/UPGRADES

Many boards were created in WebEOC as either brand new boards, or as upgrades to existing boards. The following gives brief overviews of the changes and updates that have been made.

### **Incident Dependent platform Watch Center boards**

Boards used by the Watch Center staff are some of the most heavily used boards in our WebEOC system. In previous iterations, these boards were incident independent, meaning that no matter what incident you were logged into, you could see all the information that the board contained. While this made it easy for maneuvering between incidents, it made searching for specific data very problematic. Some boards would hold 300 or more pages of information. Re-creating the boards as incident dependent made searching for specific, back-dated information an easier process. Transitioning to incident dependent boards required training the Watch Center staff to change the incident they were using each month (ex. 2012-10 Virginia Daily Activity). This proved to be a successful transition and has allowed board owners and board users to traverse these boards for information more easily. The boards that were updated are as follows:

- Daily Operations Log
- Hazmat Incident Reports
- Aircraft Incidents
- Dam Incidents
- Medevac Mission Dispatch
- Medevac Personnel Status
- SAR – Missing Persons
- Major Systems
- Other Events
- Monthly Warning Test Word / Reply

### **New Watch Center boards**

Three new WebEOC boards have also been created for the Watch Center staff and have taken place of actual physical boards that were housed in the Watch Center. The new boards in question are as follows:

- VDEM Personnel Board
- VDEM SDO/IMC Officers
- VDEM LSS/HazMat Officers

These boards provide running records of the availability status, current locations and contact information of the various officers at VDEM. It also allows for quick updating and real-time awareness, as opposed to making changes to the physical boards that were replaced. Managing this information in WebEOC allows officers in the field to have access to this information, facilitating better communication and awareness amongst them. These boards are Incident Independent, due to the fact that the information contained in these boards needs to be accessible across all incidents.

### **VERT board creations/updates**

Several boards have also been created or updated for use by VDEM staff and by the VERT. The following is a list of boards that are either new or updated from a previous version, including a description of changes and/or new functionality.

#### **1. Local Situation Report/Local Shelters board**

- i. This board is the result of combining two separate boards into one. The purpose behind this new board was to better facilitate the use and input of information into the Local Shelters board. Now, users can input sheltering information directly into their Local Situation Report, and can also see that sheltering information in a Local Shelters view. Shelter information can be populated from either view (Sitrep view or Shelter view), and the data will automatically synchronize between the two views.*
- ii. This board also contains an Emergency Support Function (ESF) view of Local Situation Report updates. The advantage of this is that an ESF can now access this view and see all updates related to that ESF from all localities in one place, as opposed to searching each individual locality to find their specific ESF information.*
- iii. There is also a Planning Section view of the Local Situation Report updates. This allows the Planning section to have a compiled list of pertinent information relating to them, similar to the ESF update view.*
- iv. The Master Dashboard for the Local Situation Report is a dashboard view with links to the various views in the Sitrep board. This view is also specifically assigned to the Planning section; giving them access to multiple views.*

#### **2. Request Management board**

- i. The board was given Mapper representation using color-coded push pin icons. Push pin colors align with the status colors in the actual WebEOC boards. This gives users identical status indications, whether looking directly at the Request Management board or viewing the icons in Mapper.*
- ii. The Time Matrix view of the Request Management board was created to give the Request Management group a timeline for requests from submission to*

completion. This helps the VERT by providing data analytics which can be studied to determine the overall efficiency of VERT mission response.

- iii. The list views of the board were enhanced with a feature to turn cells red based on certain time-based criteria. This new features indicates to requesters and responders when a mission is late being tasked to an ESF or when it has gone past its completion date/time without being completed.
- iv. The board now includes a Federal Emergency Management Agency (FEMA) view which also allows missions to be assigned to the FEMA – IMAT (Incident Management Assistance Team). These assignments can only be made by the Logistics Section Chief or by the Operations Section Chief.
- v. Fields for EMAC-related information have now been included in the Logistics Section Chief view of the board. This allows the Logistics Section Chief to input Emergency Management Assistance Compact (EMAC) information directly into a request, when previously it could only be entered in the comments section of the board.
- vi. Connectivity has been established between the Request Management board in WebEOC and the EMAC EOS system. The Logistics Section Chief can designate which missions are to be uploaded to EMAC and send them to an EMAC EOS board which lives in WebEOC, which then automatically links them to the EMAC EOS system. This was previously a manual process.

### **3. Position Log/Incident Log board**

This board replaces two boards that essentially performed the same function. Overall, it functions the same as the previous boards. Additionally, though, this new board provides the ability for Section Chiefs to view all comments made in the position logs for their respective sections. For example, the Plans Section Chief can see all comments made by users who are included in the Planning Section.

### **4. VERT Traffic Cameras**

This board is a replacement for the traffic camera function in Mapper. This board allows streaming video of the traffic camera feeds from the Virginia Department of Transportation (VDOT), a capability which is currently not available in Mapper itself. The board also provides users the ability to search and query a group of cameras instead of only being able to access cameras individually.

### **5. WebEOC Support**

This board allows for WebEOC users to not only submit help tickets, but to also make requests for new WebEOC boards, notify WebEOC Administrators of corrections or errors in function or content, and make comments or suggestions regarding WebEOC boards and/or functions. The board is managed by IT staff, so it is not intended to replace the After Action Review (AAR) board.

## **6. VERT Event Scheduler**

*This board provides a running list of events, with their respective schedules, that occur on a given day, which can be displayed on the VEOC's A/V system from a given computer that is logged into WebEOC. The board helps to keep VEOC and VERT staff on track and on time during an incident or special event. While this is currently living in WebEOC, there is a movement to turn this board into a separate website on the network.*

### **Boards for outside agencies/localities**

#### **1. TRICEPS Regional Notification board**

*This is a board created for the Tri-Cities Region in Central Virginia (Colonial Heights City, Emporia City, Hopewell City, Petersburg City, Brunswick County, Dinwiddie County, Greensville County, Prince George County and Sussex County). The board sends a notification to all participants in this region, and ONLY these participants, when a major event or incident is entered. Any of the named participants can activate the notification system.*

#### **2. VDSS Office Locations**

*This board was created for Virginia Department of Social Services (VDSS) staff in an effort to have a Mapper representation of VDSS office locations throughout the Commonwealth of Virginia. The locations have specific icons, depending upon the office type, and they are color-coded based on their status (Open, Closed, Other).*

#### **3. VDOT Situation Room**

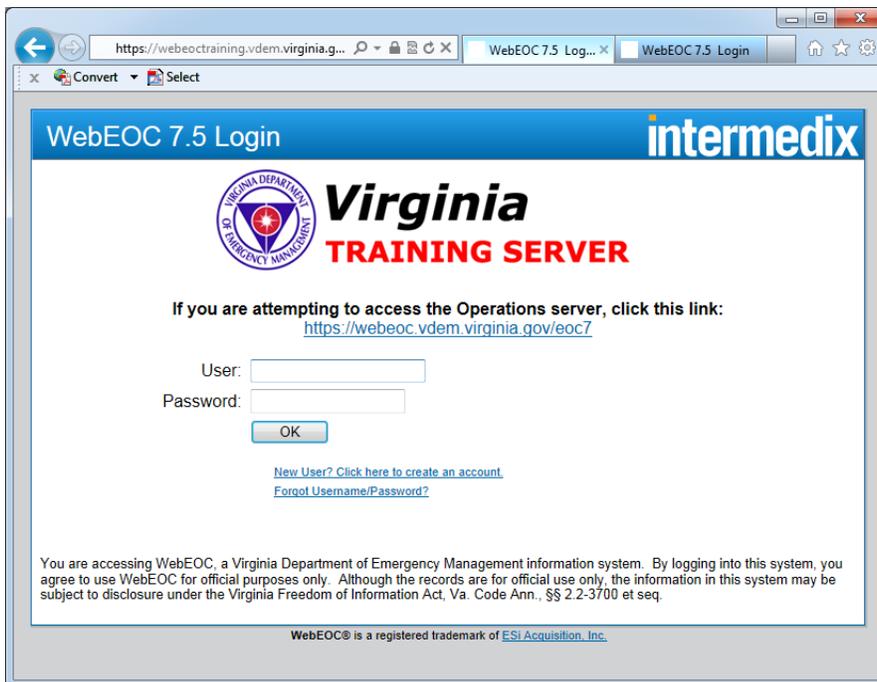
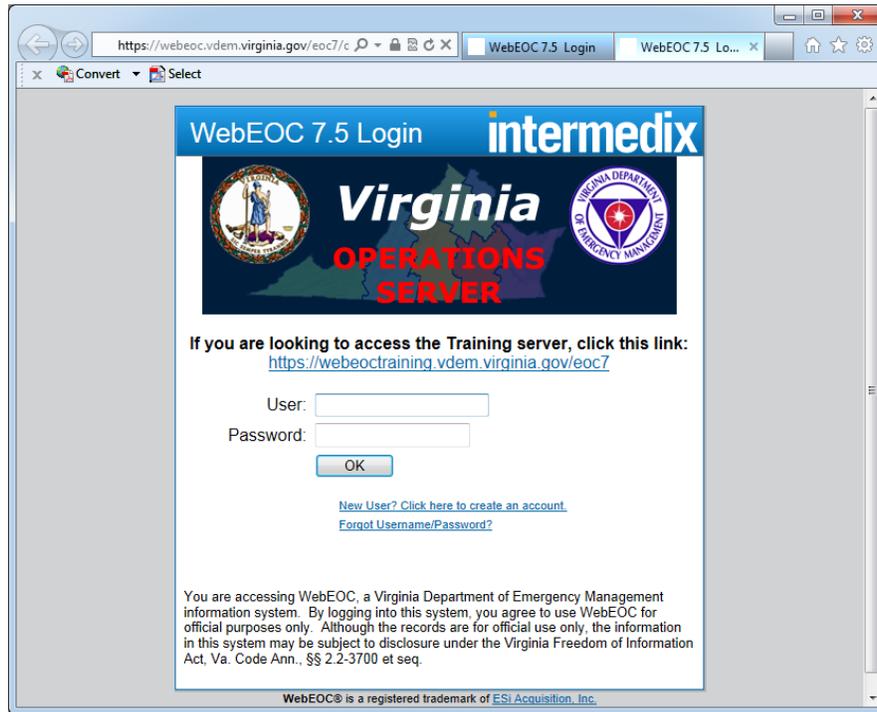
*This board was created for Virginia Department of Transportation (VDOT) staff to give them a Position Log type of daily activity log. There are additional pieces of functionality, such as the ability to sign-in and sign-out, create and edit daily activity records, as well as search, sort and print records.*

## **WEBEOC "HOUSEKEEPING" INITIATIVE**

This program was set up to maintain WebEOC user accounts. The WebEOC Support staff goes through the list of users to see which users are active or have their accounts locked. For those with their accounts locked, an e-mail is sent notifying them to update their passwords. If a user does not respond after a certain timeframe, their account will be temporarily disabled until we are notified of that user needing their access. If we are notified that the user no longer needs WebEOC access, the account is fully disabled. In any event, the user has the ability to request that their account be re-activated if it is determined that they will need their access again, and it is verified by the proper supervisors.

## WELCOME SCREENS FOR WEBEOC OPERATIONS AND TRAINING

Welcome screens were created for the Operations and Training servers so that users would know which server they were logged into. There is also a link to the Training server from the Operations server and vice versa, in the event that someone initially reaches the wrong server.



## POSITIONS CREATED/RE-PURPOSED IN WEBEOC

### 1. Search and Rescue Duty Officers

This position was created for use by VDEM Search and Rescue (SAR) team members, based on the members needing additional access to WebEOC information outside of their VERT role of ESF 09 – Search and Rescue.

### 2. VDEM – IMC

This position was re-structured from its original VDEM – VEOC position. This re-structured position is given to all members of the IMC and allows access to boards during daily activities.

### 3. Emergency Management, Dept. Of

This position has also been re-structured, but only to be a requesting state agency position. Daily activity access has been transferred over to the VDEM – IMC position.

### 4. Planning Section – Mapping/GIS Unit

This position was created for the Geospatial Information System (GIS) staff that resides within the Planning Section. This position gives these staff members the ability to use WebEOC for specific GIS purposes, not necessarily related to the Planning Section.

### 5. VERT – Executive Policy Group

This position was put in place for senior leadership inside the VERT to have access to WebEOC, in an effort to provide them situational awareness.

### 6. Executive Policy Suite

This position is for senior leadership not located in the EOC or associated with the VERT to have WebEOC access for their high-level situational awareness.

### 7. FEMA – IMAT

This position was created for FEMA representatives who are part of their IMAT teams. These team members will have the ability to provide assistance for missions should a mission reach the Federal level.

### 8. Infoplan

The Infoplan position was created for the purpose of displaying boards such as the Event Scheduler, VERT Traffic Cameras and Incident Log on various parts of the VEOC's A/V system. This gives VERT members located in the VEOC an easily visible schedule of what is going on during an event.

### 9. Planning Section – AAR

This position is a subset of the Planning Section, created for the purpose of reviewing After Action Review (AAR) items. These are assigned to select members of the Planning Section.

## **WEBEOC 2013-14 LICENSE RENEWAL**

In renewing the license of WebEOC for the 2013-14 year period, it was discussed and determined by various members of the VDEM staff to deprecate the Resource Manager plug-in. Outreach was conducted to multiple localities, agencies and VERT personnel in Virginia to get an overall picture of how much, if at all, Resource Manager was being used. Investigations concluded that the plug-in was not being used regularly and that VDEM could discontinue using it; saving the State \$3,000 a year in maintenance costs. As of this paper, licensing for the 2014-15 year period has also been purchased.

## **WEBFUSION**

With various localities, state agencies, other states, and federal and private partners having their own WebEOC systems, the ability to share information between these systems has become a critical agenda to be addressed. WebFUSION was purchased with the intent to create this connection. While the concept was in place for many years, requirements were never fully documented. Over the last several months, resources have been put in place to revitalize the WebFUSION connectivity amongst the various users in the Commonwealth, from a technical perspective as well as in terms of general outreach to users. Connections with the National Capital Region (NCR) and the Hampton Roads Region, as well as other localities, state agencies and private partners, are evolving beyond the testing phase.

### **WebFUSION Published Boards**

In an effort to better serve localities that have their own WebEOC systems, we are publishing some of our WebEOC boards through WebFUSION for them to subscribe to. The benefit to localities is that they can access and enter information directly into our VDEM WebEOC system from inside their own WebEOC system. This cuts down on having to enter information twice (once in their local system and once in the VDEM system). The boards that have been published currently are as follows:

- Dam Incidents
- Hazmat Incidents
- Monthly Warning Test Word / Reply
- Position Log/Incident Log
- VDEM POC Information
- News Releases
- Talking Points

While work is being done to fully establish locality connectivity, we are simultaneously reaching out to other WebEOC owners (Virginia state agency, other states and Federal and Private sector) in an effort to share information and establish a community of connectivity.

## **MEETINGS REGARDING WEBEOC AND WEBFUSION**

Meetings for WebEOC have become a priority for VDEM and the VERT. These meetings help facilitate communication and decision making, the sharing of ideas, and the overall advancement of WebEOC throughout Virginia.

### **WebEOC Work Group meetings**

Every 3<sup>rd</sup> Thursday of every other month, VDEM staff gather together to discuss items related to WebEOC. Topics covered range from new boards being created, technical news, trouble tickets to the vendor, and proposed ideas for new boards. Input from localities, state agencies, and VERT personnel are brought to the table and discussed as well.

### **Virginia WebFUSION Work Group meetings**

This work group, formed in January 2014, was put together with members from VDEM and localities which have their own instances of WebEOC, with the intent of establishing a consensus of how information will be shared between the separate instances of WebEOC, how localities will populate information up to the State and to address technical and procedural issues regarding WebFUSION. Meetings are held every quarter.

## **WEBEOC AND WEBFUSION SERVER UPGRADES**

The server environments for WebEOC and WebFUSION have gone through major upgrades in order to facilitate a more robust hardware platform for our users. This helps in reducing system downtime and maximizes peak performance when several users are logged in at once.

The WebEOC Operations and Training environments have been set up in identical fashion; both having Windows Enterprise Server 2008 R2 as the OS platform on dual load-balanced 64-bit servers. The WebFUSION environment has the same configuration. The database cluster that these server environments connect to also received an upgrade to a 64-bit server with the SQL Server 2008 R2 OS platform.

## **FUTURE PROJECTS (WEBEOC AND WEBFUSION)**

Many new projects have been lined up for WebEOC and WebFUSION in order to better accommodate our users as well as better sharing and disseminating information.

### **1. WebEOC/EWA Phoenix (VDSS) integration**

This integration will help assist with better gathering of information regarding sheltering numbers. Virginia Department of Social Services (VDSS) uses EWA Phoenix to gather their sheltering information (locations, totals, etc.), and having an automatic link into the WebEOC Local Shelters board would eliminate duplication error as well as provide the VERT with more accurate shelter numbers.

### **2. VDH/VHHA WebFUSION integration with VDEM**

This project is an effort to better link the Virginia Department of Health (VDH), the Virginia Hospital and Healthcare Association (VHHA) and VDEM, enabling the sharing of information from boards using WebFUSION. Discussions for this project have already begun and are continuing to happen as of this brief.

### **3. Future WebFUSION boards**

One of the end results for the WebFUSION project is to have three of our major State boards published out to WebFUSION for our subscribers to utilize. They are as follows:

- Initial Damage Assessment (IDA)
- Local Situation Report/Local Shelters
- Request for Assistance/Request Management

This will give our subscribers the ability to communicate with the VERT from within their own WebEOC system without logging into our system. This should not only end the possibility of duplication error, but also provide easier access to communication with our WebEOC boards, and possibly promote more frequent usage.

## **SUMMARY**

In summary, WebEOC continues to be the standard Crisis Information Management Systems application for the Commonwealth of Virginia. VDEM continues to explore ways of utilizing WebEOC with relation to daily activities, communication with other WebEOC systems, and a broader range of information sharing. These initiatives will increase the need for, and value of, WebEOC as the possibilities of its use continue to grow in the Commonwealth of Virginia.

## ACRONYMS

- WebEOC – Web Emergency Operations Center
- CIMS – Crisis Information Management System
- VDEM – Virginia Department of Emergency Management
- VERT – Virginia Emergency Response Team
- SDO – Staff Duty Officer
- IMC – Incident Management Cadre
- LSS – Local Support Services
- SAR – Search and Rescue
- ESF – Emergency Support Function
- FEMA – Federal Emergency Management Agency
- GIS – Geographical Information Systems
- IMAT – Incident Management Assistance Team
- EMAC – Emergency Management Assistance Compact
- NCR – National Capital Region
- POC – Point of Contact
- OS – Operating System
- VDSS – Virginia Department of Social Services
- IDA – Initial Damage Assessment