WFDSS 3.1 / 3.2 Release Notes
(Deployed March 2 / April 1, 2009)

I. Login Page

a. The title on the Login Page no longer indicates that WFDSS is a 'Prototype Application – Currently Under Development'. WFDSS is still under development, but the 'Prototype' designation no longer applies.

b. HTTPS is used for user authorization and authentication on the login page. The majority of the issues associated with the initial use of HTTPS have been resolved. For example, users requesting new accounts should no longer need to enter their account information twice.

c. The WFDSS Logo in the banner is a link to the WFDSS Home Page. (This is the case for every page within the WFDSS application.)

II. Help

a. Page-level context sensitive help has been introduced. Content does not exist for all of the pages, but will be added on a regular basis as it is completed.

b. Hover text has been added to the majority of the page components (left-hand menu options, buttons, links, column headers, input fields, drop-down lists, radio buttons). Additional content will be added to the hover text over time. The display of hover text within version 6 of Internet Explorer might be intermittent.

III. Miscellaneous

a. WFDSS Messages

   i. WFDSS generated messages have been modified to include the system (Production or Training) that generated the email.

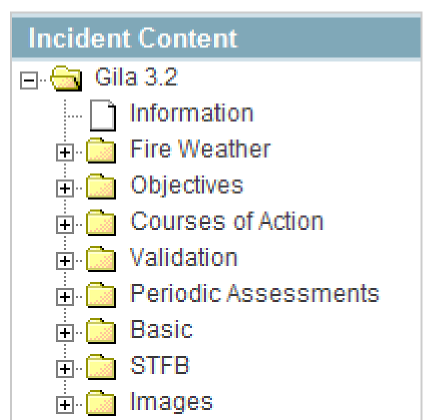
   ii. The source information is displayed near the bottom of the message. That is, it is on the line above the 'Please do not reply …' line that occurs at the bottom of every message.

b. 'My Home' Perspective

   i. The Home menu item was renamed to 'My Home' to avoid confusion with the WFDSS Home page.

c. Incident Content Tree

An 'Incident Content Tree' is referenced several times within the release notes. As a result, the tree is being defined at this time to facilitate understanding when it is referenced elsewhere.



   i. The incident content tree is an expandable / collapsible tree used to navigate within the content associated with a specific incident.

   ii. The tree is displayed in the left-hand column of the page when

      1. An incident decision is being edited.
      2. A report is being edited.
      3. The 'Full (Incident) Report' is being viewed.

IV. Maps

a. Help text is displayed beneath the map tools for the currently selected map tool.

b. Hover text exists for all of the map tools.

c. Map Images

   i. Map images can be saved from any map within WFDSS other than the Intelligence Map.
   ii. Map images are associated with an incident.
   iii. Map images can only be saved if the base layer is the WFDSS Topos layer.
   iv. Images are created from the Map Image panel found under the Info tab.
   v. An image name is required.
   vi. The image description is optional. If included, the image description will be displayed with the image when it is placed within an incident decision or report.
   vii. Map images are accessed from the incident content tree by expanding the Images folder and then the Map folder. The map images are organized by the last name of the user who created the map.
   viii. The quality of the map images is a work in progress. There are a few known map layers (landscape attributes for one) that are not captured when a map is created. These layers are expected to be available in the next WFDSS release.

d. Incident Shape Downloads

   i. A shape download tool ( ) was added to the incident shape tools for downloading an incident-specific shape.
   ii. Shapes downloaded from the layer switcher will be downloaded in WGS84 (decimal degrees).

V. Incident Perspective

a. Stratified Cost Index
   i. The 2009 Stratified Cost Index models for the western and eastern US Forest Service were included in the April 1, 2009 release.
   ii. Stratified Cost Index was completely removed from the Analysis Perspective.
      1. SCI is no longer accessible from the Analysis List.
      2. Analysis List filters can no longer include SCI.
      3. Existing Analysis List filters that previously used SCI should be modified or deleted.
   iii. The Incident Perspective left-hand menu item was changed from ‘SCI Request’ to ‘Stratified Cost Index’.
   iv. Clicking on the left-hand menu ‘Stratified Cost Index’ item displays the Stratified Cost Index list for the open incident.
   v. Basic Fire Behavior is used to calculate the SCI Fire Intensity Level [using the 75^{th} percentile of the burnable pixels (flame length > 0) within a 750 meter radius of the ignition point]. As such, creating a Stratified Cost Index model is

an asynchronous process. To update the SCI list to determine whether the new model exists, click on the left-hand menu ‘Stratified Cost Index’ item.

vi. Stratified Cost Index Business Rules
1. Any user with Incident editing privileges may create an SCI or copy an existing SCI.
2. Only the user who created (or copied) a Stratified Cost Index can edit the parameters and accept the SCI results.
3. Only a user with Incident ownership privileges can delete an SCI.
4. Only a user with Incident editing privileges can view SCI parameters prior to the SCI results being accepted.
5. Any user can view SCI parameters and results after the results have been accepted.
6. SCI parameters and results will not be visible within the incident content tree until the SCI results are accepted.

vii. Stratified Cost Index List
1. Users (with appropriate privileges) can Edit, View, Copy, Create, and Delete SCI models.
2. The Stratified Cost Index list includes the SCI Name, Editor Name, Completed Date, and Model Name.

viii. Stratified Cost Index Parameters / Results
1. The SCI parameters and results are displayed on the same page.
2. The Results are displayed in an expandable / collapsible section at the top of the page.
3. Every SCI parameter is auto-calculated other than the SCI name and the values entered for the Estimated Acreage.
4. The ‘Distance to Nearest Town’ and Elevation are only calculated for the eastern US Forest Service SCI model.

b. RAVAR Analysis
i. Only Geographic Area Editors, National Editors, and RAVAR Analysts can request a RAVAR analysis.

c. Incident Privileges
i. An incident owner can grant other WFDSS users editing, review, and approval privileges from the Incident Privileges page.
ii. Review and approval privileges are mutually exclusive.
iii. Additional filtering capabilities were added. Note that a ‘check-box’ filter allows owners to quickly view the list of editors, reviewers, and approvers.
iv. Incident Editors are allowed to edit the content of the incident.
v. Incident Editors are NOT allowed to
1. Modify incident privileges.
2. Transfer ownership of the incident.
3. Define the incident to be of national significance (only National Editors are allowed to do this).
4. Create or delete an incident decision.
5. Request a review of an incident decision.

vi. Incident Reviewers are allowed to review an incident decision, either accepting the decision as is or rejecting the decision.

vii. Incident Approvers are allowed to approve an incident decision, either approving the decision as is or rejecting the decision.

viii. Incident Reviewers and Approvers are not allowed to edit the content of the incident (unless they are also granted incident editing privileges).

d. Image Upload

i. Images can be uploaded into WFDSS for use within Incident Decisions and Reports. To upload an image, click on the ‘Image Upload’ item in the Incident Perspective left-hand menu.

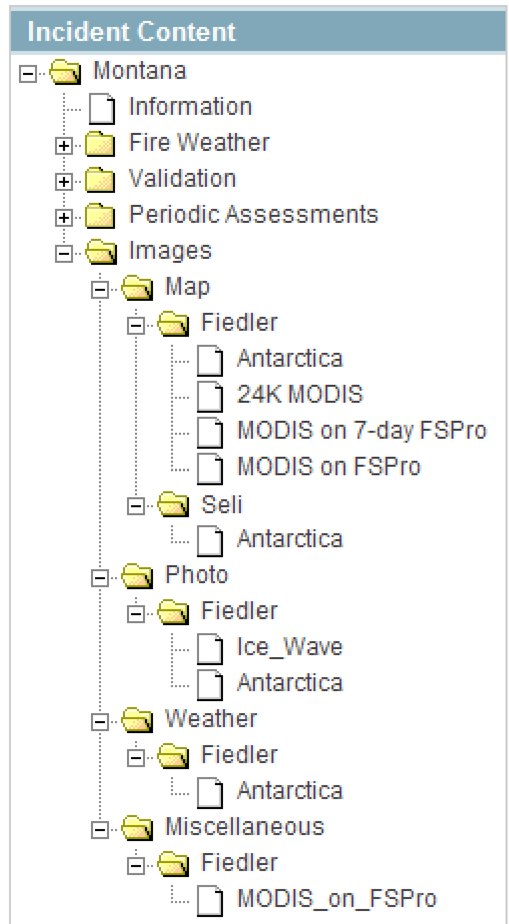
ii. Uploaded images are associated with a single incident.

iii. Any user with incident editing privileges can upload an image for an incident.

iv. Image names of a given type created by a given user must be unique within a given incident. This includes images created from a map. That is, multiple ‘Antarctica’ maps can be created provided they are created by different users.

v. When uploading an image, the user chooses a type – Map, Photo, Weather, or Miscellaneous.

vi. Uploaded images are accessed from the incident content tree by expanding the Images folder. Images are organized by type and then by the last name of the user who uploaded the image.



e. Automated Basic and Short Term Analyses

i. When running an automated Basic or Short Term analysis, the landscape extent cannot exceed 30 miles in either direction.

ii. The resolution used for an automated Basic or Short Term analysis varies depending upon the size of the landscape file. The resolution is always a multiple of 30 meters and is set to 90 meters when the landscape size is 400 square miles.

iii. An improved version of Wind Ninja is included in the 3.2 release. Wind Ninja is used to calculate gridded winds.

iv. Multiple analyses can be simultaneously processed on the same server.

f. Dispatcher Role

Dispatcher authority relative to the decision process is as follows:

i. Dispatchers can create incidents within their geographic area.

ii. Dispatchers can delete incidents within their geographic area provided that the incident is not owned by an incident author AND the incident was created within the last 24 hours.
iii. Dispatchers can validate or invalidate the default course of action as long as the incident is not owned by an Incident Author.
iv. Dispatchers can re-validate the default course of action after they have invalidated it provided an author has not accepted ownership.
v. Dispatchers can update the majority of the information on the Incident Information page even after the incident is out, but not while an incident decision is being reviewed.
vi. Dispatchers can upload shape files.
vii. Dispatchers cannot upload images.
viii. Dispatchers cannot save or upload a planning area.
ix. Dispatchers cannot create an SCI.
x. Dispatchers cannot modify the FMU list.
xi. Dispatchers cannot set the Estimated Cost, create/edit/delete incident objectives, create/edit/delete incident requirements, or create/edit/delete strategic directions.
xii. A Dispatcher cannot define an incident to be of national significance.
xiii. A Dispatcher cannot create or delete an Incident Decision.
xiv. A Dispatcher cannot grant Incident Privileges.
xv. A Dispatcher cannot transfer ownership of an incident.

g. Planning Area
i. The Planning Area is a shape defining the area of concern associated with a decision.
ii. Planning Area shapes are created on the Situation Assessment map by drawing a polygon and saving it as a Planning Area.
iii. There is only one current Planning Area at a given point in time.
iv. When an incident decision is published, the current Planning Area is saved as the Planning Area associated with the decision. That is, in this case, creating a new Planning Area will NOT delete the previous Planning Area from the system.
v. The Planning Area is used to determine the set of Fire Weather Zones affecting the incident.
vi. The Planning Area is used to determine the set of FMUs affecting the incident. In order for the geo-spatial intersection to function, FMU shapes must exist within the WFDSS FMU shape layer. If the intersection succeeds, the area of the intersection will be included in the incident FMU list. In addition, the FMUs will be non-deletable – to remove a specific FMU from the list, a new Planning Area shape excluding the FMU would need to be saved. Note that we do not expect to have a national geo-spatial FMU layer, so FMUs can be manually added to the FMU list.
vii. The Planning Area will eventually be used in conjunction with a ‘Values Inventory’, but this functionality is not available with this release.

h. Course of Action
i. The estimated incident cost was added to the Course of Action page.

  ii. The estimated incident cost is a required field for publishing an incident decision.

i. Validation

  i. The validation page allows users to validate the pre-planned response or a course of action being proposed in a new incident decision.
  ii. An expandable / collapsible incident history list section is displayed at the top of the page.
  iii. There are several scenarios associated with validating a course of action.
    1. **Scenario I:** Dispatcher Created Incident without an Owner
      a. The validation section consists of a comment field and the following question:

      Is the pre-planned initial attack being successful?

      b. If the dispatcher answers Yes to the question, an incident owner is not required but an author is not precluded from accepting the incident.
      c. If the dispatcher answers No to the question, an Incident Owner is required for this incident (a phone call is highly recommended). A dispatcher may reverse their No answer if conditions change provided that an author has not yet accepted incident ownership.
    2. **Scenario II:** Owner Accepts a Dispatcher Created Incident or the Owner Creates an Incident
      a. The validation section consists of a comment field and the following question (note that the current course of action is the pre-planned response within this scenario):

      Are the Strategic Objectives being satisfied with the current Course of Action?

      b. If an incident owner or editor answers No to the question, an incident decision needs to be made. An incident owner / editor cannot reverse their No answer. That is, once someone answers No, the incident moves from Scenario II into Scenario III.
      c. Owner can choose to monitor the incident without publishing a decision provided that option is specified in the Strategic Objectives. If they choose to simply monitor the incident, they must include the "Monitor incident" strategic direction in the 'pre-planned' Course of Action.
    3. **Scenario III:** Owner is in the Process of Publishing a Decision
      a. The validation section consists of a comment field and the following question:

      Are the Incident and Strategic Objectives being satisfied with the proposed Course of Action?

      b. An incident decision cannot be published unless the last response to the question is yes.
      c. The page also includes several items to consider when answering the question.

j. The Decision List

  i. Incident Owners can create an incident decision from the Decision List page.
  ii. The name of a non-published decision is 'Pending Decision'. It appears at the top of the list.

    iii. The name of a published decision is the date and time of when the decision was published (i.e., when it received its final approval).
    iv. Vertical expand / collapse icons can be used to optionally display the sub-reports of the decision document.
    v. An incident owner or editor can choose to edit the decision as a whole or an individual sub-report provided that someone else is not already editing it.
    vi. Only incident owners and editors can view the content of a decision while it is being edited.
    vii. Incident reviewers and approvers can view the content of a decision once it is reviewable.
    viii. All WFDSS users can view the content of a decision once it is published.

k. The Decision Information Page
    i. The Decision Information Page is accessible to all viewers from the Decision List page by clicking on the ‘View Information’ button.
    ii. If the decision information is being viewed, users can view
        1. General decision information,
        2. The current set of reviewers and approvers,
        3. Requirements that must be completed before the incident decision can be reviewed, and
        4. The decision history list.
    iii. If the information for a decision sub-report is being viewed, users can view
        1. General decision information, and
        2. The sub-report history list.

l. Editing a Decision
    i. Only incident owners and editors can edit a decision or a decision sub-report.
    ii. The Decision editing page contains four sections
        1. The decision content tree,
        2. The incident content tree,
        3. The editing pane, and
        4. The incident content preview pane.
    iii. The decision content tree allows the editor to navigate within the pages they are currently editing. It will be possible to add content structure (additional pages) to a section in future releases.
    iv. The incident content tree allows users to select content from the incident to view or to paste into the page they are editing.
    v. The editing pane is a ‘rich text editor’ control which allows users to edit the page content.
    vi. The incident content preview pane allows users to view the incident content that is currently selected in the incident content tree.
    vii. Either the edit pane or the incident content preview pane is expanded at a given point in time. To switch between the panes, click anywhere on the section bar of the pane that is currently collapsed.
    viii. There a number of tools within the editing pane – four of the tools deserve special mention:
        1.  - The Save tool is mentioned to remind editors to use it frequently. It is only active when an editor has modified content on the page. Editing

changes will be lost if an editor leaves the page and does not first save the page content.

2.  - Use the ‘WFDSS Content’ tool to insert the currently selected incident content on to your page. You can preview the currently selected content first by expanding the preview pane. Remember to position your cursor on the page prior to inserting the WFDSS content.
3.  - Use the ‘Plain Text’ tool if you want to remove formatting from content you copied to the clipboard from an external source. This tool strips out all of the formatting and allows you to preview the text prior to insertion.
4.  - Use the ‘Word’ tool if you want to strip out some of the formatting from content you copied to the clipboard from a Microsoft Word document. Word content typically contains a large amount of styling information that is better left out. Note that not all of the formatting information will be removed. The ‘stripped down’ content is displayed in a preview pane prior to allow you to preview it prior to insertion on to the page. ***Use of this tool is highly recommended.***

Required components of an Incident Decision

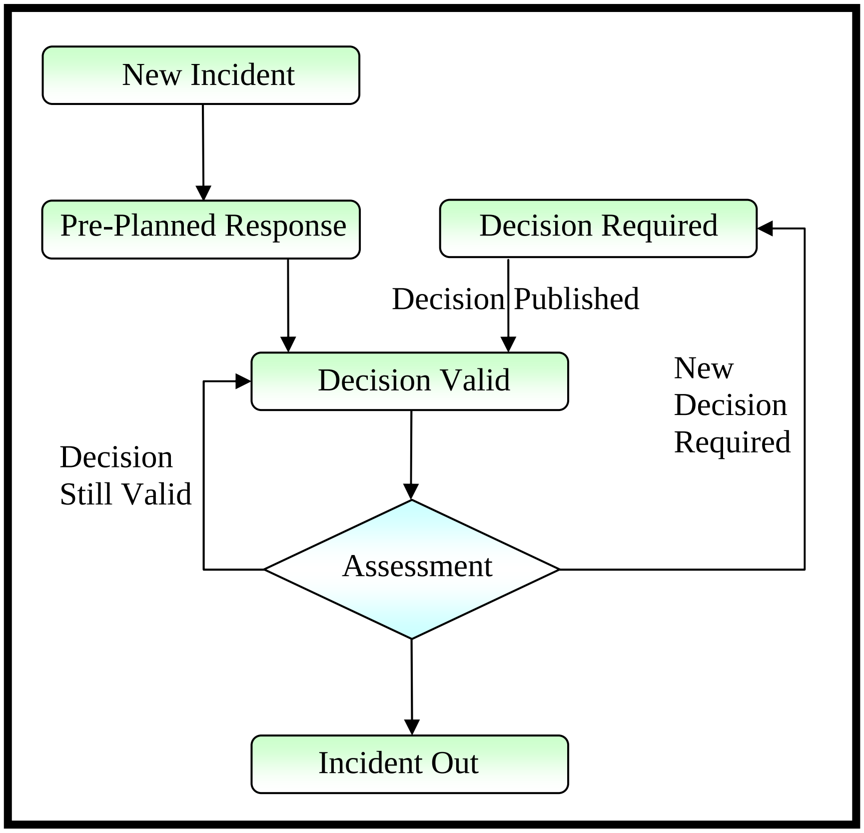
a. Basic information entered on the Incident Information page – this information is automatically included in the decision. This includes specifying an incident size greater than 0.0 acres. The Fire Code (financial code), unit name, containment, controlled, & out dates are NOT required.
b. A Planning Area – the planning area is created on the Situation Assessment map. The Planning Area is discussed in more detail in the Intelligence Perspective section of the release notes.
c. Fire Weather Zone Forecast(s) – the fire weather zone forecasts are automatically included in the decision.
d. The Incident FMU List – the FMU list is automatically included in the decision, but an incident author / owner must make sure that the FMU list contains at least one FMU.
e. The Strategic Objectives and Management Requirements for the FMUs in the Incident FMU List – the Strategic Objectives and Management Requirements are automatically included in the decision.
f. The list of Incident Objectives and Requirements – these lists are automatically included in the decision and may be empty.
g. The Course of Action (list of Strategic Directions) – the Course of Action is automatically included in the decision, but at least one Strategic Direction must be included in the Course of Action.
h. An incident owner / editor must answer Yes to the Validation question:
Are the Incident and Strategic Objectives being satisfied with the proposed Course of Action?
i. An Estimated Cost – the cost is entered on the Course of Action page. The estimated cost will be included on the Decision Summary page (not part of this release).
j. Approval Signature(s) – every specified approver must approve the decision. The approval signature(s) will be included on the Decision Summary page (not part of this release).
k. Decision Rationale – the system does not enforce this requirement, but owners / editors should always include a rationale in their decisions.

Requirements That Must Be Completed Before An Incident Decision Can Be Reviewed

Requirement(s)
An incident Fire Number is required.
An incident size greater than 0 acres is required.
A Planning Area shape file is required.
At least one Decision Approver must be granted privileges.
At least one FMU must exist in the list of FMUs for the incident.
An Estimated Cost is required for the incident. (Courses of Action page)
The proposed Course of Action needs to be validated (from the Validation page).

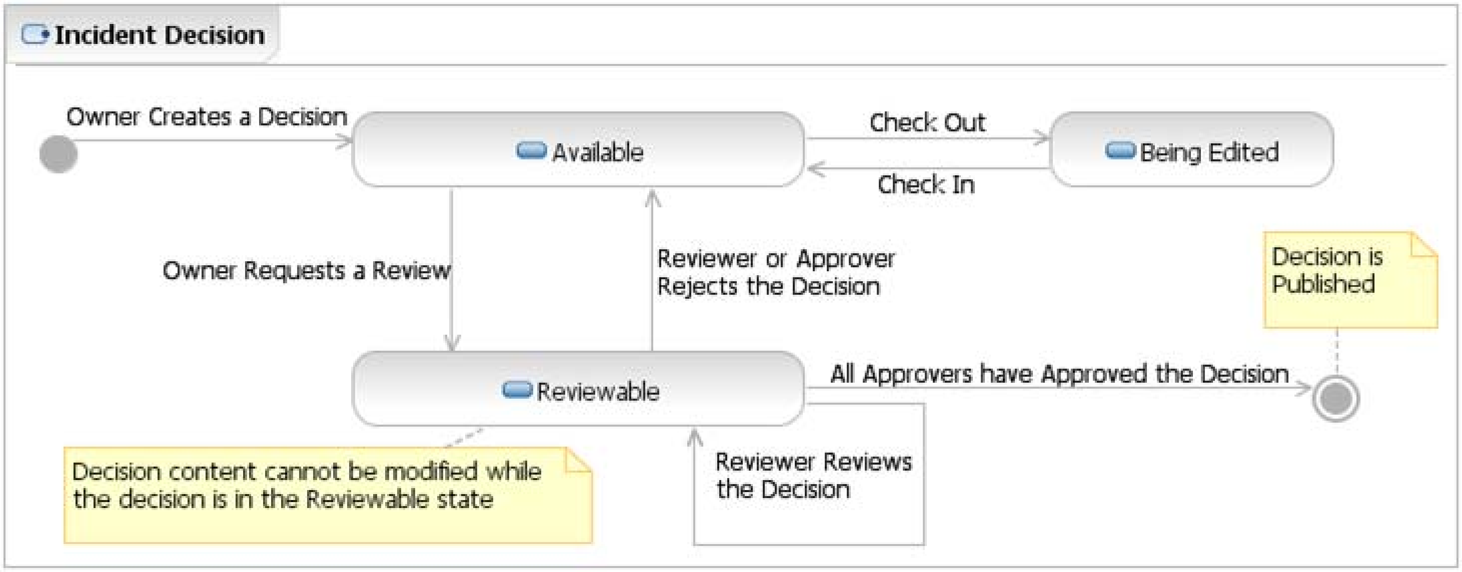
A list of the remaining decision requirements is displayed on the decision information page. This information is also displayed when an owner requests a review prior to completing all of the requirements.

The Decision Process Workflow



The diagram depicts the decision process workflow. In the most common scenario, a decision document is never published. That is, when a dispatcher creates an incident, initial attack is the pre-planned response, and the fire is successfully extinguished, an incident decision is not created. Note that in this instance, an incident author is also not required to accept incident ownership.

The Decision Authoring Process



The state diagram depicts the decision authoring process from decision creation to the time when the decision is published. There are a number of business rules associated with the decision authoring process. They are outlined below:

Decision Business Process Rules

1. Creating a Decision
    a. Only one Incident Decision is active at a given point in time. That is, a new decision always supersedes the previous decision.
    b. Only the Incident Owner can create an incident decision.
        i. An incident owner can transfer ownership of their incident.
        ii. Geographic Area Editors can transfer ownership of an incident within their geographic area.
        iii. National Editors can transfer ownership of any incident.
        iv. Ownership can be transferred to any user with incident authoring privileges.
        v. Ownership can be transferred to a group, but a group member must have incident authoring privileges to be an owner of the incident.
        vi. If an incident is owned by a group and an author is added to the group, the author that was added is an owner of the incident. Similarly, if an author is removed from the group, the removed author is no longer an owner of the incident.
    c. Only one non-published Incident Decision can exist at a given point in time.
2. Checking Out an Incident Decision
    a. An Incident Decision is broken down into multiple sub-reports:
        i. Assessment
        ii. Objectives
        iii. Course of Action
        iv. Validation
        v. Rationale
    b. A given sub-report can only be edited by one person at a given point in time. As such, it is implicitly checked out by the person when they choose to edit an ‘Available’ sub-report.
    c. Any user with incident editing privileges is allowed to check out an ‘Available’ sub-report.
    d. Any user with incident editing privileges is allowed to check out the entire decision. If the entire decision is checked out, no one else can edit the decision.
3. Checking In an Incident Decision

   a. The decision / sub-report can be checked in by the person who checked it out.
   b. The decision / sub-report can be checked in by an incident owner. Any changes that have not been saved by an editor will be lost when an incident owner checks in a decision / sub-report being edited by a different user.
4. Requesting a Review
   a. All the decision sub-reports must be checked in before a review can be requested.
   b. Only an incident owner can request a review.
   c. Once a decision review is requested, the content of the decision is locked down (cannot be edited or deleted). This includes (but is not limited to)
      i. Incident objectives and incident requirements
      ii. Strategic Directions within the Course of Action
      iii. Various incident information parameters (incident cause, national significance, etc.)
      iv. Planning area
      v. Incident FMU list
   d. The Incident Objectives, Incident Requirements, and Strategic Directions (Course of Action) included with the decision are those that are marked for inclusion at the time the review is requested.
   e. All of the Incident Content links included within an Incident Decision are ‘exploded’ at the time the decision becomes reviewable. ‘Exploding’ the content means that the link to the content is replaced with actual content. This includes links to external content such as the Fire Weather Zone forecasts associated with the current planning area. Two important consequences of exploded content are:
      i. The Incident Decision content is immutable when the decision is reviewable. That is, the published Decision content will be identical to the reviewed decision content with two exceptions:
         1. Activation dates for incident objectives, incident requirements, and strategic directions will not be set until the decision is published.
         2. The decision summary page (containing information such as when the decision was published, the incident owner, reviewers, and approvers) is not added to the decision until it is published. Note that the decision summary page will be added in the next release of the software.
      ii. Incident Decision content is not affected by changes made within the incident after the Decision is published.
   f. A backup of the ‘non-exploded’ decision is created in case the Incident Decision is rejected and the Incident Content links need to be restored.
5. Reviewing a Decision
   a. The Incident Owner is responsible for defining the set of decision reviewers. This set may be empty. This set can be modified during the review process.
   b. Only users granted Reviewer privileges may review a decision.
   c. Reviewers are not allowed to edit any portion of the incident decision while reviewing the decision.
   d. A Reviewer has three options:
      i. They may choose to take no action at all.
      ii. If they ‘accept’ the decision, the decision remains in the Reviewable state.
      iii. If they ‘reject’ the decision, the decision is returned to the Available state.
   e. When a Reviewer accepts or rejects the decision, an ‘electronic signature’ (user id and timestamp) of the action is maintained within WFDSS.
   f. A comment is NOT associated with accepting a decision.
   g. A comment is required if a Reviewer rejects a decision.

6. Approving a Decision
    a. The Incident Owner is responsible for defining the set of decision approvers. This set must contain at least one member. This set can be modified during the review process.
    b. Only users granted Approver privileges may approve a decision.
    c. Approvers are not allowed to edit any portion of the incident decision.
    d. An Approver has two options:
        i. If they 'approve' the decision, the decision remains in the Reviewable state unless all the Approvers have approved the decision, in which case the decision is published.
        ii. If they 'reject' the decision, the decision is returned to the Available state.
    e. When published, the Incident Decision is finalized. That is, the Decision can no longer be rejected by a reviewer or an approver.
    f. When a decision is published, the activation date of incident objectives, incident requirements, and strategic directions are set (if they were not included in a previous decision).
    g. When a decision is published, the decision summary page is added to the end of the decision.
    h. Once an Incident Decision has been published, the Incident and the Decision cannot be deleted from the system.
7. Assessments
    a. There are essentially four Periodic Assessment states:
        i. No Decision Exists – When no decision exists, there is nothing to assess.
        ii. Decision Valid – The current decision is valid and a periodic assessment is not overdue. In this state, incident approvers are allowed to assess the incident and decide that the "current decision is still valid" or a "new decision is required".
        iii. Assessment Overdue – This state is essentially the same as the previous state. However, when an assessment is overdue, the last person who approved the decision or assessed the current decision will receive an email notification that an assessment is overdue. In addition, all geographic area editors for the geographic area containing the incident will receive an email notification provided that their agency affiliation has incident jurisdiction.
        iv. New Decision Required – When a new decision is required, a Periodic Assessment is not required until after the new decision is published.
    b. Only incident approvers can perform a periodic assessment.
    c. The person performing an assessment has two options – they can decide that the course of action is or is not satisfying the objectives.
    d. Once a decision is published, periodic assessments are required until the incident is declared out. The assessment period can be from 1 to 14 days. The default assessment period is 1 day.
    e. Each time an assessment is performed, the assessor can reset the assessment period.
    f. Each time an assessment is performed, the assessor can choose to receive an email reminder the morning that the next assessment is due.
       Each time an assessment is performed, the assessor can include a comment with the assessment. However, the assessor must include a comment if the assessor decides that a new decision is required.