



# VIRTEL How To ...

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## User's Guide

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# Table of contents

<b>1.</b>	<b>Introduction .....</b>	<b>5</b>
1.1.	Messages ERRM121 – ERRM127 .....	5
<b>2.</b>	<b>Virtel Web Access.....</b>	<b>6</b>
2.1.	VWA User Interface .....	6
2.1.1.	Toolbar .....	7
2.1.2.	Status line.....	18
2.1.3.	Cursor field .....	18
<b>3.</b>	<b>Lines .....</b>	<b>20</b>
3.1.	Messages ERRM121 – ERRM127 .....	20
<b>4.</b>	<b>Terminal.....</b>	<b>21</b>
4.1.	Messages ERRM121 – ERRM127 .....	21
<b>5.</b>	<b>Entry Point .....</b>	<b>22</b>
5.1.	Messages ERRM121 – ERRM127 .....	22
<b>6.</b>	<b>Transactions &amp; Applications .....</b>	<b>23</b>
6.1.	Messages ERRM121 – ERRM127 .....	23
<b>7.</b>	<b>Directories .....</b>	<b>24</b>
7.1.	Messages ERRM121 – ERRM127 .....	24
<b>8.</b>	<b>Security.....</b>	<b>25</b>
8.1.	Messages ERRM121 – ERRM127 .....	25
<b>9.</b>	<b>Scripting.....</b>	<b>26</b>
9.1.	Messages ERRM121 – ERRM127 .....	26
<b>10.</b>	<b>Audit &amp; Traces.....</b>	<b>27</b>
10.1.	Messages ERRM121 – ERRM127 .....	27

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<b>11.</b>	<b>Statistiques .....</b>	<b>28</b>
<b>11.1.</b>	<b>Messages ERRM121 – ERRM127 .....</b>	<b>28</b>

# 1. Introduction

## 1.1. Messages ERRM121 – ERRM127

These messages may be displayed in the user's browser window following an unsuccessful upload of an HTML page, script, or other element to VIRTEL.

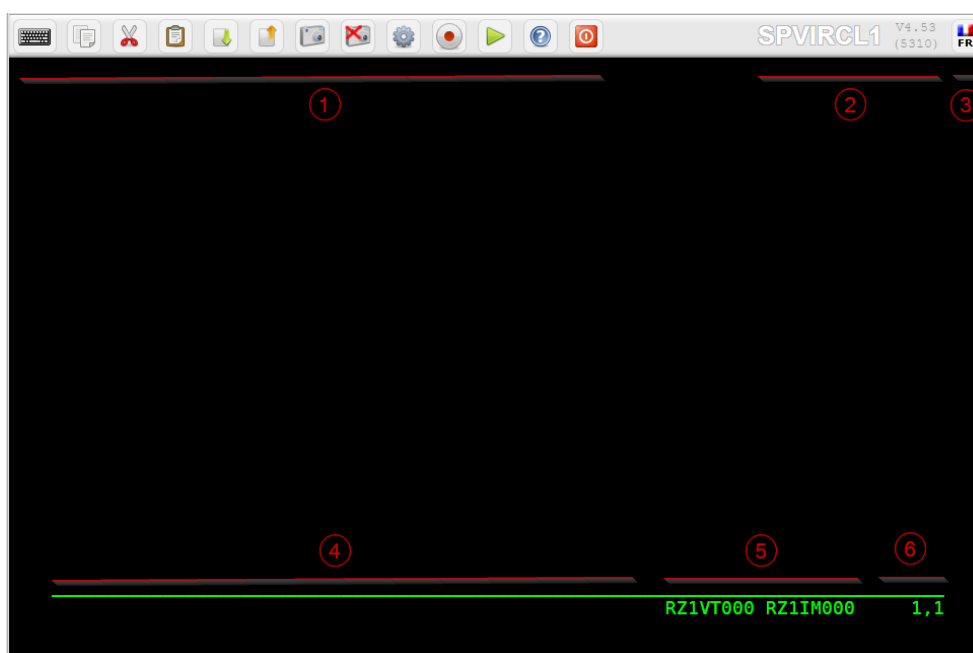
ERRM121 - UPLOAD NOT AUTHORIZED

## 2. Virtel Web Access

### 2.1. VWA User Interface

The VIRTEL Web Access user interface is in the form of a conventional 3270 screen divided into three areas:

- The toolbar located in the upper of the screen contains the icons of functions (1), the information environment (2), the language selection (3).
- The status line at the bottom includes the monitoring zone (4), particulars of the terminals associated with the session (5), mode and cursor position (6).
- The area between the toolbar and the status bar is used to display the contents of 3270 screens, it can be of variable size between 24x80 and 62x132.



*The VWA 3270 screen's areas*

### 2.1.1. Toolbar

The toolbar is located at the top of the 3270 screen. It contains, icons, language selection tool and environment information. Some of those component can be removed, added or modified.

#### 2.1.1.1. How to hide the toolbar

The administrator may wish to prevent users from accessing features like copy/paste, print, and settings by removing corresponding icons, or by hiding the toolbar. This example shows how to hide the toolbar using a custom.css file:

```
/* VIRTEL Web Access style sheet for site customization
 * (c)Copyright SysperTec Communication 2007,2010 All Rights Reserved
 */

#toolbar {display:none;}/*
```

*Example custom.css for hiding the toolbar*

You can also use custom.js to remove icons individually from the toolbar, see [“Removing unwanted toolbar icons”](#), page 10.

#### 2.1.1.2. Changing background color of the toolbar buttons

This example shows how to change the background color of the toolbar buttons by adding orders in the custom.css file:

```
/*
 * VIRTEL Web Access style sheet customisation the background of the toolbar
 * buttons(c)Copyright SysperTec Communication 2014 All Rights Reserved
 */
|- transparent "at rest"
|- white when cursor moves on
|- yellow when button is clicked

#toolbar td .tbButton {
  background-color: inherit;
}
#toolbar td .tbButton:hover {
  background-color: white;
}
#toolbar td .tbButton:active {
  background-color: yellow;
}

| To remove the background color and the border of buttons "at rest":

#toolbar td .tbButton {
  background-color: inherit;
  border: 1px solid transparent;
}
```

*Example custom.css managin the background color of the toolbar buttons*

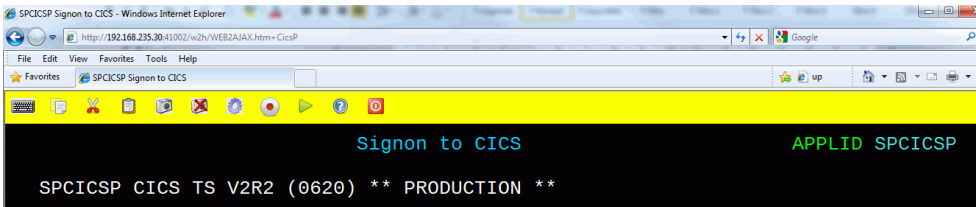
#### 2.1.1.3. Customizing the toolbar color by application

It is sometimes useful for the user to have a clear visual indication of which system he or she is logged on to. This example shows how to set the color of the toolbar to yellow for SPCICSP and pink for SPCICSQ.

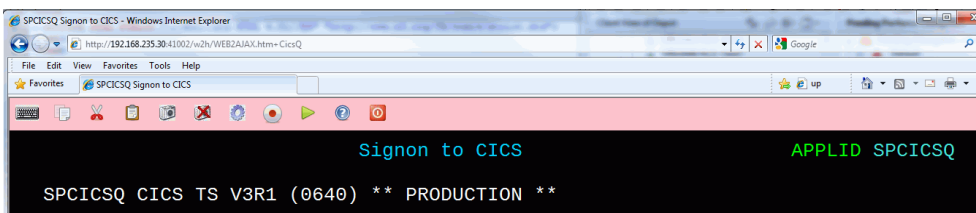
```
/* VIRTEL Web Access style sheet for site customization
 * (c)Copyright SysperTec Communication 2007,2010 All Rights Reserved
 */

.SPICICSP #toolbar {background-color:yellow;}
.SPICISQ #toolbar {background-color:pink;}
```

*Example custom.css for coloring the toolbar according to CICS region*



*Web Access screen with yellow toolbar for SPICICSP*



*Web Access screen with pink toolbar for SPICISQ*

---

### 2.1.1.4. Add a web link in the toolbar

You can add a web link in the toolbar by using the following order included in a custom.js file:

```
function after_standardInit() {
    * Adds a button to the toolbar which performs a Google search
    addtoolbarbutton(position, "http://www.yourtargetsit.com/favicon.ico",
    "Title", linked_function);
}
```

*Example to add a web link in the toolbar.*

---

#### 2.1.1.4.1. Example : Add a Google Search link in the toolbar

```
function after_standardInit() {
    /*
    * Adds a button to the toolbar which performs a Google search for
    * the text selected in the red box in the 3270 screen, or for the
    * word at the cursor if no box is drawn
    */
    addtoolbarbutton(999, "http://www.google.com/favicon.ico",
    "Search engine query", do_search);
}

function do_search() {
    var searcharg = VIR3270.getBoxedText() || VIR3270.getWordAtCursor();
    var windowname = "search";
    var searchURL = "http://www.google.com";
    if (searcharg) searchURL += "/search?q=" +
    encodeURIComponent(searcharg.replace(/\s+/g, " "));
    var windowopts = "location=yes,status=yes,resizable=yes," +
    "scrollbars=yes,toolbar=yes,menubar=yes,width=640,height=480";
```



```

var searchwin = window.open(searchURL, windowname, windowopts);
if (searchwin) searchwin.focus();
}

```

### 2.1.1.5. Adding a company logo

This example shows how to display an icon (for example, a company logo) at the left of the toolbar:

```

/*
 * VIRTEL Web Access style sheet customisation for company logo
 * (c)Copyright SysperTec Communication 2012 All Rights Reserved
 */

#toolbar td#companyIcon {
    height:30px;
    display:table-cell;
}

#companyIcon div {
    background-image:url("/w2h/virtblue.jpg");
    background-position:0px -4px;
    background-repeat:no-repeat;
    height:26px;
    width:145px;
}

```

*Example custom.css for displaying company logo in the toolbar*

This example shows how to replace the Virtel logo in the VIRTEL Web Access menu and the Application menu by your company logo:

```

/*
 * VIRTEL Web Access style sheet for site customisation
 * (c)Copyright SysperTec Communication 2013 All Rights Reserved
 * $Id$
 */

#appmenulogo {
    background-image: url("mycompany.gif");
    height: 65px;
    width: 266px;
}

```

*Example custom.css for replacing the Virtel logo by a company logo*

Note: If no explicit path is given, the company logo will be loaded from the same directory as the custom.css file.

### 2.1.1.6. Icons

#### 2.1.1.6.1. Adding a toolbar icon

This example uses the `after_standardInit` function to insert additional icons into the toolbar when the session is started. Icons may subsequently be added or removed from the toolbar after each screen by means of the `after_responseHandle` function.

```

/*
 * (c)Copyright SysperTec Communication 2012 All Rights Reserved
 * VIRTEL Web Access customer-specific javascript functions
 */

```

```
/*
 * Adds a button to the toolbar which performs a Google search for
 * the text selected in the red box in the 3270 screen, or for the
 * word at the cursor if no box is drawn
 */
function after_standardInit() {
    addtoolbarbutton(999, "http://www.google.com/favicon.ico",
        "Search engine query", do_search);
}
function do_search() {
    var searcharg = VIR3270.getBoxedText() || VIR3270.getWordAtCursor();
    var windowname = "search";
    var searchURL = "http://www.google.com";
    if (searcharg) searchURL += "/search?q=" +
        encodeURIComponent(searcharg.replace(/\s+/g, " "));
    var windowopts = "location=yes,status=yes,resizable=yes,"+
        "scrollbars=yes,toolbar=yes,menubar=yes,width=640,height=480";
    var searchwin = window.open(searchURL, windowname, windowopts);
    if (searchwin) searchwin.focus();
}
```

*Example custom.js to customize the toolbar icons*

---

#### 2.1.1.6.2. Removing unwanted toolbar icons

This example uses the `after_standardInit` function to disable macro functions by removing the corresponding icons from the toolbar.

```
/*
 * (c)Copyright SysperTec Communication 2012 All Rights Reserved
 * VIRTEL Web Access customer-specific javascript functions
 */
function after_standardInit() {
    /* Remove macro buttons from the toolbar */
    removetoolbarbutton("startrecording");
    removetoolbarbutton("playback");
}
```

*Example custom.js to remove selected toolbar icons*

The names of the other toolbar icons which can be removed in this way are:

- capture,
- disconnect,
- document-print-preview,
- edit-copy,
- edit-cut,
- edit-paste,
- emptybuf,
- file-rcv,
- file-send,
- help,
- keypad,
- playback,
- printer,
- settings,

- settingsV2,
- startrecording.

(settingsV2 is présent only if w2hparms.js contains "settingsGUI":{"version":"V2"}, or "settingsGUI":{"version":"V1+V2"},)

To hide the toolbar completely, see [“Hiding the toolbar”](#), page 7.

To hide only the Virtel Application name, see [“Showing / Hiding server informations”](#), page 15.

#### 2.1.1.6.3. Removing file transfer icons

VIRTEL Web Access supports transfer of files between the browser and a TSO session using the IND\$FILE protocol. The function is activated displayed only for the transaction defined with the SCENINDT scenario entered in Input and Output scenario fields. For some specific users, it may be necessary to remove the file transfer icons from the toolbar. This can be done by using the removetoolbarbutton function using the appropriate variable name.(See [“Removing unwanted toolbar icons”](#), page 10.)

#### 2.1.1.6.4. Removing macro icons

Icons for recording or executing a Macro are automatically present in the toolbar. To make them unavailable you should use the removetoolbarbutton function using the appropriate variable name.(See [“Removing unwanted toolbar icons”](#), page 10.)

#### 2.1.1.6.5. Positionning toolbar icons

In certain circumstances, the default position of an icon may not be at the user's convenience. Is possible to change an icon's position based on the position of another icon.

```
/*
 * Customize the location of dynamic toolbar buttons.
 * The calls to this function are ignored when they
 * return nothing, or an integer not greater than 0.
 *
 * Customizable buttons IDs :
 * > '3278T'
 * > 'document-print-preview'
 * > 'file-send'
 * > 'file-recv'
 * > 'printer'
 */
function customize_toolbarButtonIndex(id) {
  if (id==='printer' || id==='document-print-preview') {
    return getToolBarButtonIndex('disconnect') + 1;
  }
}
```

*Example custom.js to select a position for printer icon*

#### 2.1.1.6.6. Centering non standard icons

The best size for an icon is 32x32 pixels. For bigger or smaller icons, it possible to offer better center rendering in modifying the content of the class attribut passed within the "addtoolbarbutton" function in conjunction of using a specific css attribut.

```
/*
 * (c)Copyright SysperTec Communication 2014 All Rights Reserved
```

```
* VIRTEL Web Access customer-specific javascript functions
* Resizing a too small or too big toolbar icon.
* For example toosmall_pic.png=22x22 and toobig_pic.jpg=145x30
*/

addtoolbarbutton(999, "/w2h/toosmall_pic.png", "Custom button #1 tooltip",
do_search, "tbButton size22x22");
addtoolbarbutton(999, "/w2h/toobig_pic.jpg", "Custom button #2 tooltip",
do_search, "tbButton size145x30");
```

*Example custom.js to specify the toolbar icon size*

```
/*
#toolbar td img.tbButton.size22x22 {
width: 22px;
height: 22px;
padding: 5px; /* padding is calculated to center the picture horizontally
and vertically in the 32x32 allocated area. (5+22+5 = 32) */
}

#toolbar td img.tbButton.size145x30 {
width: 145px;
height: 30px;
padding: 1px 0; /* padding is calculated to center the picture vertically
in the 32x32 allocated area (1+30+1 = 32) without any
horizontally padding */
}
```

*Example custom.css to manage a toolbar icon with a non standard size*

---

### 2.1.1.6.7. Removing 3D/hover effects on the toolbar buttons

This example shows how to remove the 3D/hover effects on toolbar buttons by adding orders in the custom.css file:

```
/*
* VIRTEL Web Access style sheet customisation for removing 3D/hover effects
* (c)Copyright SysperTec Communication 2014 All Rights Reserved
*/

#toolbar td .tbButton,
#toolbar td .tbButton: hover,
#toolbar td .tbButton: active {
background-color: inherit;
border: inherit;
box-shadow: inherit;
}
```

*Example custom.css for removing 3D/hover effects on buttons*

---

### 2.1.1.6.8. File Transfer Icons

#### 2.1.1.6.8.1. Add or remove File Transfer icons

---

The File Transfer icons are present in the toolbar only for access to TSO and if the transaction includes an INPUT and/or OUTPUT scenario with a call to the INDSCEN\$ macro (See "TSO File Transfer" in "Virtel Web Access User Guide").

### **2.1.1.6.8.2. Removing file transfer icons**

---

VIRTEL Web Access supports transfer of files between the browser and a TSO session using the IND\$FILE protocol. The function is activated displayed only for the transaction defined with the SCENINDT scenario entered in Input and Output scenario fields. For some specific users, it may be necessary to remove the file transfer icons from the toolbar. This can be done by using the removetoolbarbutton function using the appropriate variable name.(see “[Removing unwanted toolbar icons](#)”, page 10.)

---

### **2.1.1.6.9. Macro Icons**

#### **2.1.1.6.9.1. Removing Macro icons**

---

(See “[Removing unwanted toolbar icons](#)”, page 10.)

---

### **2.1.1.6.10. Troubleshooting**

#### **2.1.1.6.10.1. Icon display troubleshooting**

---

If some icons on the toolbar are displayed with some parasites on the border, please check that the browser is not in a zoom mode greater than 100%.

---

### **2.1.1.7. Background information**

---

#### **2.1.1.7.1. Adding custom text by application to the toolbar**

Another way of providing a clear visual indication of which application the user is logged on to is to add a text label to the toolbar. In this example the text “MVS1” is displayed when logged on to application TSO1A, and “MVS2” is displayed for application TSO2A.

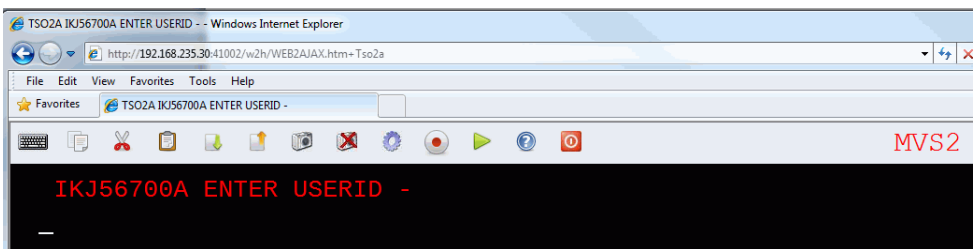
```

/*
 * VIRTEL Web Access style sheet for site customisation
 * (c)Copyright SysperTec Communication 2007,2010 All Rights Reserved
 */
.toolbarLast{
text-align: right; /* Text alignment */
}
.TS01A .toolbarLast:before {
content: "MVS1";
opacity: 0.25;
font-size: 30px;
width: 100%;
z-index: 1000;
-webkit-text-stroke: 1px blue; /* Select color */
padding-right: 5px;          /* To separate cells */
}

.TS02A .toolbarLast:before {
content: "MVS2";
opacity: 0.25;
font-size: 30px;
width: 100%;
z-index: 1000;
-webkit-text-stroke: 1px red; /* Select color */
padding-right: 5px;          /* To separate cells */
}

```

*Example custom.css for adding custom text to the toolbar*



*Web Access screen with custom text in the toolbar*

#### 2.1.1.7.2. Adding application name to the toolbar

Another way of providing a clear visual indication of which application the user is logged on to is to add the application name label to the toolbar. In this example the text "TSO" is displayed when logged on to application TSO, and "SPCICSH" is displayed for application SPCICSH.

```

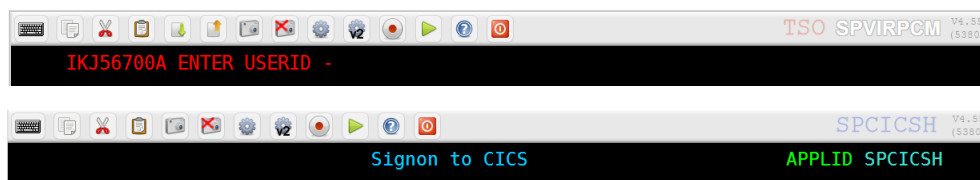
/*
 * VIRTEL Web Access style sheet for site customisation
 * (c)Copyright SysperTec Communication 2007,2010 All Rights Reserved
 */
.toolbarLast{
text-align: right; /* Text alignment */
}
.TS0 .toolbarLast:before {
content: "TSO";
opacity: 0.25;
font-size: 30px;
width: 100%;
z-index: 1000;
-webkit-text-stroke: 1px red; /* Select color */
padding-right: 5px;          /* To separate cells */
}

.SPCICSH .toolbarLast:before {
content: "SPCICSH";
}

```

```
opacity: 0.25;
font-size: 30px;
width: 100%;
z-index: 1000;
-webkit-text-stroke: 1px blue; /* Select color */
padding-right: 5px;           /* To separate cells */
}
```

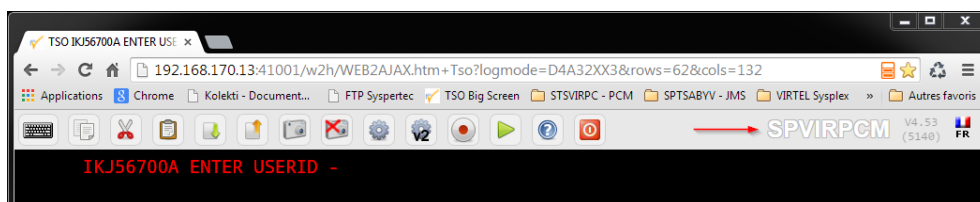
Example custom.css for adding custom text to the toolbar



Web Access screen with custom application name in the toolbar

### 2.1.1.7.3. Showing / Hiding server informations

It is sometimes useful to have a clear visual indication of which server a user is logged on to, its version and the maintenance level applied on the system. By default, the value specified into the APPLID parameter of the VIRTCT is displayed at the top-right of the toolbar as shown below. This information is followed by the running version number and the Virtel Web access level of maintenance used. This last information is enclosed in parentheses.



The running version and the level of maintenance cannot be hidden, only the server name can be **permanently** removed by modifying the w2hparm.hideinfo attribut present in the customized w2hparms.js file:

```
/*
 * Configuration of the server name connected to.
 */
w2hparm.hideinfo = true;
```

Example w2hparm.js for hiding the mainframe application name on which a user is connected to.

If the default value is preserved, the user can hide this information for his own usage by checking "Hide Virtel information in toolbar" in the Display tab of the settings panel.

### 2.1.1.7.4. Showing / Hiding running version and maintenance level

On the right side of the toolbar, the running version and the level of maintenance of VIRTEL is shown. As this information is important and very helpful in case of troubleshooting, those information cannot be hidden.

### 2.1.1.8. Language

#### 2.1.1.8.1. Hide the language icon

You can hide the language icon by using the following orders included in a custom.css file:

```
#toolbar td#toolbar-lang { width: 1px; }  
#toolbar td#toolbar-lang a { display: none; }
```

*Example to hide the language icon.*

#### 2.1.1.8.2. Assign a default language

You can force default language and leave to the customer the possibility to select another one if necessary by using the following order included in a custom.js file:

```
function after_standardInit() {  
    /* Will force default language to Croatian and will leave to the customer  
       the possibility to select another one if necessary */  
    oVWAMsg.changeLang("hr");  
}
```

*Example to assign a default language.*

Possible values for the language code are:

- DE for Deutsch
- EN for English
- ES for Spanish
- FR for French
- HR for Croatian
- IT for Italian

They must be entered in lowercase.

#### 2.1.1.8.3. Assign a permanent default language

You can force default language and not allow the customer to select another one. You can do it by using the following order included in a custom.js file:

```
function after_standardInit() {  
    /* Will force default language to Croatian and will not allow the customer to select another one if necessary */  
    oVWAMsgVWAMsg.restrictLanguages("hr");  
}
```

*Example to assign a permanent default language.*

Possible values for the language code are:

- DE for Deutsch
- EN for English
- ES for Spanish
- FR for French



- HR for Croatian
- IT for Italian

They must be entered in lowercase.

### 2.1.2. Status line

---

#### 2.1.2.1. Messages ERRM121 – ERRM127

These messages may be displayed in the user's browser window following an unsuccessful upload of an HTML page, script, or other element to VIRTEL.

ERRM121 - UPLOAD NOT AUTHORIZED

#### 2.1.2.2. Printer name

##### 2.1.2.2.1. Messages ERRM121 – ERRM127

These messages may be displayed in the user's browser window following an unsuccessful upload of an HTML page, script, or other element to VIRTEL.

ERRM121 - UPLOAD NOT AUTHORIZED

#### 2.1.2.3. Relay name

##### 2.1.2.3.1. Messages ERRM121 – ERRM127

These messages may be displayed in the user's browser window following an unsuccessful upload of an HTML page, script, or other element to VIRTEL.

ERRM121 - UPLOAD NOT AUTHORIZED

#### 2.1.2.4. Status field

##### 2.1.2.4.1. Messages ERRM121 – ERRM127

These messages may be displayed in the user's browser window following an unsuccessful upload of an HTML page, script, or other element to VIRTEL.

ERRM121 - UPLOAD NOT AUTHORIZED

### 2.1.3. Cursor field

---

#### 2.1.3.1. Messages ERRM121 – ERRM127

These messages may be displayed in the user's browser window following an unsuccessful upload of an HTML page, script, or other element to VIRTEL.

ERRM121 - UPLOAD NOT AUTHORIZED

## 3. Lines

### 3.1. Messages ERRM121 – ERRM127

These messages may be displayed in the user's browser window following an unsuccessful upload of an HTML page, script, or other element to VIRTEL.

ERRM121 - UPLOAD NOT AUTHORIZED

## 4. Terminal

### 4.1. Messages ERRM121 – ERRM127

These messages may be displayed in the user's browser window following an unsuccessful upload of an HTML page, script, or other element to VIRTEL.

ERRM121 - UPLOAD NOT AUTHORIZED

## 5. Entry Point

### 5.1. Messages ERRM121 – ERRM127

These messages may be displayed in the user's browser window following an unsuccessful upload of an HTML page, script, or other element to VIRTEL.

ERRM121 - UPLOAD NOT AUTHORIZED

# 6. Transactions & Applications

## 6.1. Messages ERRM121 – ERRM127

These messages may be displayed in the user's browser window following an unsuccessful upload of an HTML page, script, or other element to VIRTEL.

ERRM121 - UPLOAD NOT AUTHORIZED

## 7. Directories

### 7.1. Messages ERRM121 – ERRM127

These messages may be displayed in the user's browser window following an unsuccessful upload of an HTML page, script, or other element to VIRTEL.

ERRM121 - UPLOAD NOT AUTHORIZED



# 8. Security

## 8.1. Messages ERRM121 – ERRM127

These messages may be displayed in the user's browser window following an unsuccessful upload of an HTML page, script, or other element to VIRTEL.

ERRM121 - UPLOAD NOT AUTHORIZED

## 9. Scripting

### 9.1. Messages ERRM121 – ERRM127

These messages may be displayed in the user's browser window following an unsuccessful upload of an HTML page, script, or other element to VIRTEL.

ERRM121 - UPLOAD NOT AUTHORIZED

# 10. Audit & Traces

## 10.1. Messages ERRM121 – ERRM127

These messages may be displayed in the user's browser window following an unsuccessful upload of an HTML page, script, or other element to VIRTEL.

ERRM121 - UPLOAD NOT AUTHORIZED

# 11. Statistiques

## 11.1. Messages ERRM121 – ERRM127

These messages may be displayed in the user's browser window following an unsuccessful upload of an HTML page, script, or other element to VIRTEL.

ERRM121 - UPLOAD NOT AUTHORIZED