

Uplinx © Report Tool 4 (CCMreporter) for Cisco Unified Communications 4

User Guide and Release Notes

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SYSTEM REQUIREMENTS

- Cisco Unified Communications Manager 4.1 or later in major version 4
- PC 32-bit or 64-bit, recommended 2 GB RAM, 1.8 Ghz Dual Core CPU or better (depending on amount of phones and database size)
- Windows Seven, Windows Vista, Windows XP SP2/SP3 with .Net 2.0 SP 1 or .NET 3.5 SP1
- (optional) Microsoft Word 2007 to generate Word reports; VBA macros need to be installed and enabled
- Web Browser (IE 7, IE 8, Mozilla Firefox 2/3, - other CSS 2 compliant browsers)
- LAN connection from the PC where the Report Tool is run on to the servers (it works also via VPN or any other IP connectivity as long as there is decent quality. Bandwidth must be at least 150 Kbps and max 200ms RTT. Please test the VPN QoS first with the trial version before purchasing a license).

FEATURE SUMMARY

- Reports for Cisco Unified Communication Manager 4
- Phone Inventory Tool: Collect serial numbers and location (connected switch name and port)
- Reporting objects can be selected and further specified based on filter criteria
- generate Word, HTML, CHM (Compressed HTML Help) reports based on your own customizable Word and CSS templates
- easily generate good looking reports with the included 4 Word templates and style sheets
- Chapter descriptions (also customizable)
- Option to defer reformatting in Word to reduce time on site

SUPPORTED CISCO PRODUCTS AND SOFTWARE VERSIONS

The Report Tool 4 (CCMreporter) supports automatic generation of reports for the following Cisco UC software:

Cisco Unified Communications Server:	Versions supported:	Reports generated for:
Cisco Unified Communications Manager (CUCM)	4.1.3 or later, 4.2, 4.3	Configuration Reports Phone Inventory reports

Note: Cisco Unified Communications Manager 6 and 7, CUPS 6 and 7, CUC 2 and 7 are supported in the Uplinx 'Report Tool 6 and 7'

SUPPORTED PHONES IN PHONE INVENTORY TOOL

- 794x, 796x, 797x and associated G versions
- 7937 conference phones
- WLAN phones 7920, 7921 and 7925
- 7911, 7912, ATA 186
- 7905, 7906

Note: Phones must have web server enabled and run SCCP images.

USER GUIDE

HOW TO GENERATE A REPORT

A report is generated in 3 steps:

- Step 1: Set the access credentials to the server and verify connectivity
- Step 2: Set the desired report content and report settings
- Step 3: Generate the report

Each of the steps is outlined in detail below:

STEP 1: SET THE ACCESS CREDENTIALS TO THE SERVER AND VERIFY CONNECTIVITY

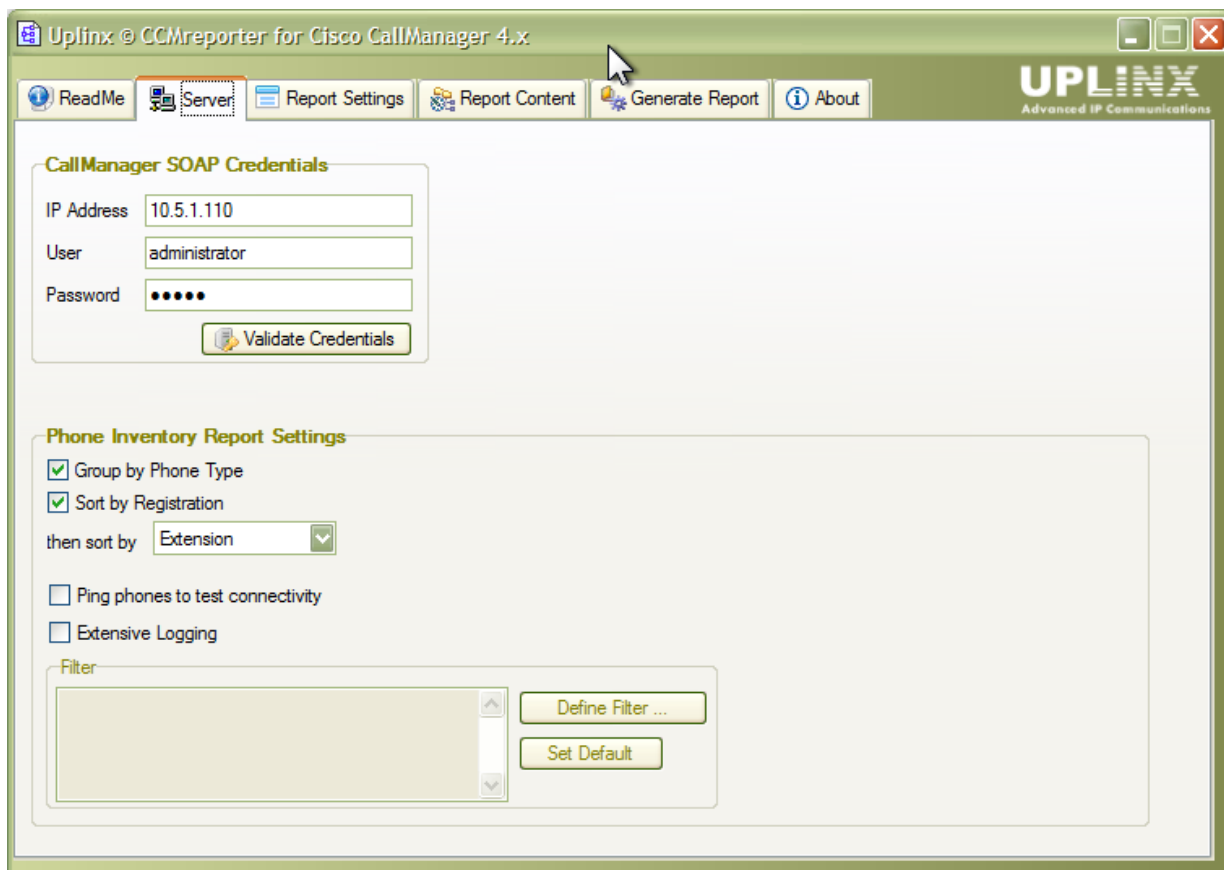


Figure 1: Set the credential to access the server

In the tab 'Server' set the server credentials. Verify connectivity with the validate button. In all Callmanager versions 4.x the necessary AXL SOAP interface is running by default. No setup or configuration options are available for AXL SOAP in Callmanager version 4.

STEP 2: SET THE DESIRED REPORT FORMAT



Figure 2: Set the report settings like report title, description, style and other options.

In the group box 'Report Settings' set the following:

- The 'Report For' text field: This will be used in the title and filename of the report. You may wish to use the customer's company name, and/or the purpose of the report. For example: 'Audit for Uplinx Pty Ltd.'
- The 'Description; text field: This will be placed below the title in the generated report and should describe details of the author or source of the report. For example: created on 27 July 2009 by Michael K.

The group box 'Report Format' contains settings which determine the template and the style for the report:

- The 'Report Style' combo box selects the Cascading Style Sheet (CSS) for the main part of the report in the word document and the formatting for the HTML document. This determines the table formatting and the font used in the tables and the description for each chapter.
- The 'Description; text field: This will be placed below the title in the generated report and should describe details of the author or source of the report. For example: created on 27 July 2009 by Michael K.
- Report Format: A4 or Letter. You should modify the Word template if you choose Letter.
- 'Report Style': This selects the CSS (Style sheet) and determines the style of the report.

To review the HTML and word report with these settings, use the 'Test Report Style' button. This button generates a simulated Word report with the settings without requiring the server. This may also help to quickly test your customized Word, CSS and HTML templates.

In the group boxes 'Presenter' and 'Client Information' you can set your and client information as it is displayed in the Document Information section of the word or HTML document. When the tick boxes of these 2 sections are not selected, the document information section will not appear in the reports.

For customizing report templates, please refer to 'Customizing your own templates' on p. 13.

STEP 3: SET THE REPORT CONTENT

To define the Report content (i.e. objects to be included in the report) and additional settings (i.e. condensed or detailed format), follow these steps:

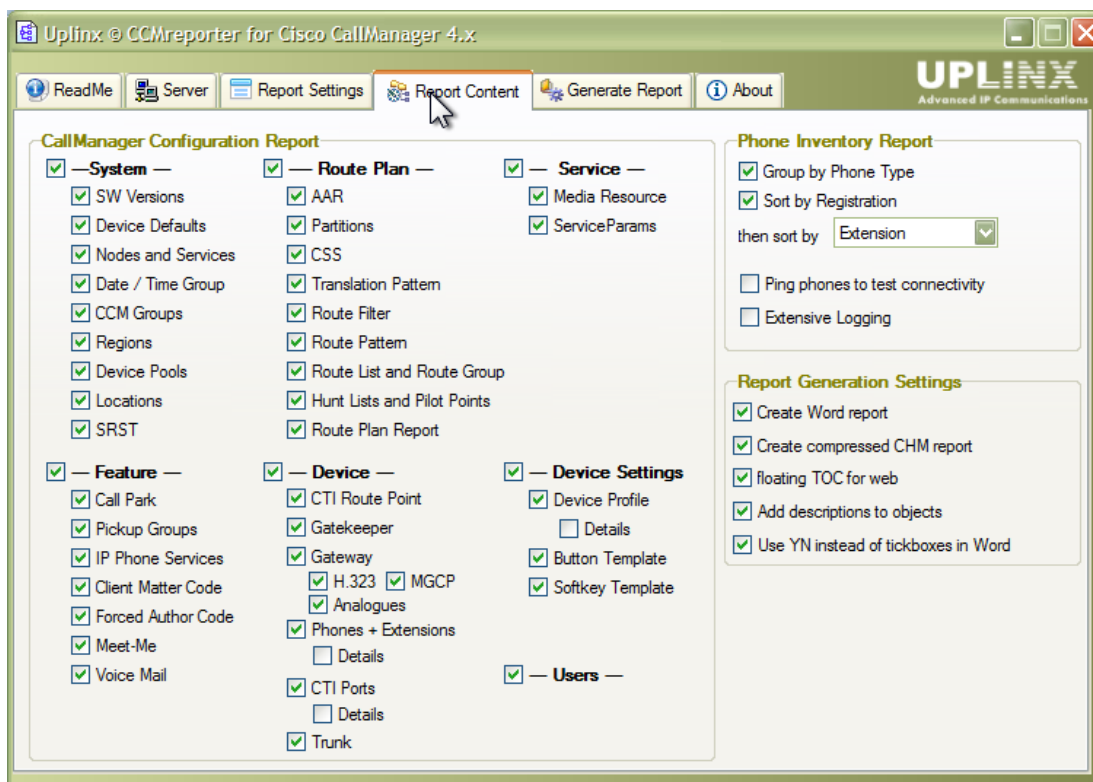
1. On the Report 'Content' tab, select the objects to include. (to include/exclude a tree and its children objects – tick/untick a folder heading)
2. Some objects have additional settings (Condensed or Detailed format).

Please consider the following:

- For Word document format: a system with 400 phones will produce a report that is approximately 400 pages in length. To reduce the number of pages, split the report into several parts by selecting only the following objects:
 - Users (Detailed / Condensed settings)
 - Phones
 - User Device Profiles
 - All other settings

Defer the Word formatting by selecting the 'No' button when the Word dialog appears.

- Generate the HTML and CHM report on site (select the 'Cancel' button when the Word dialog appears) and manually generate the Word report. To manually generate the Word report, please see section "Large Word reports" on p.12.

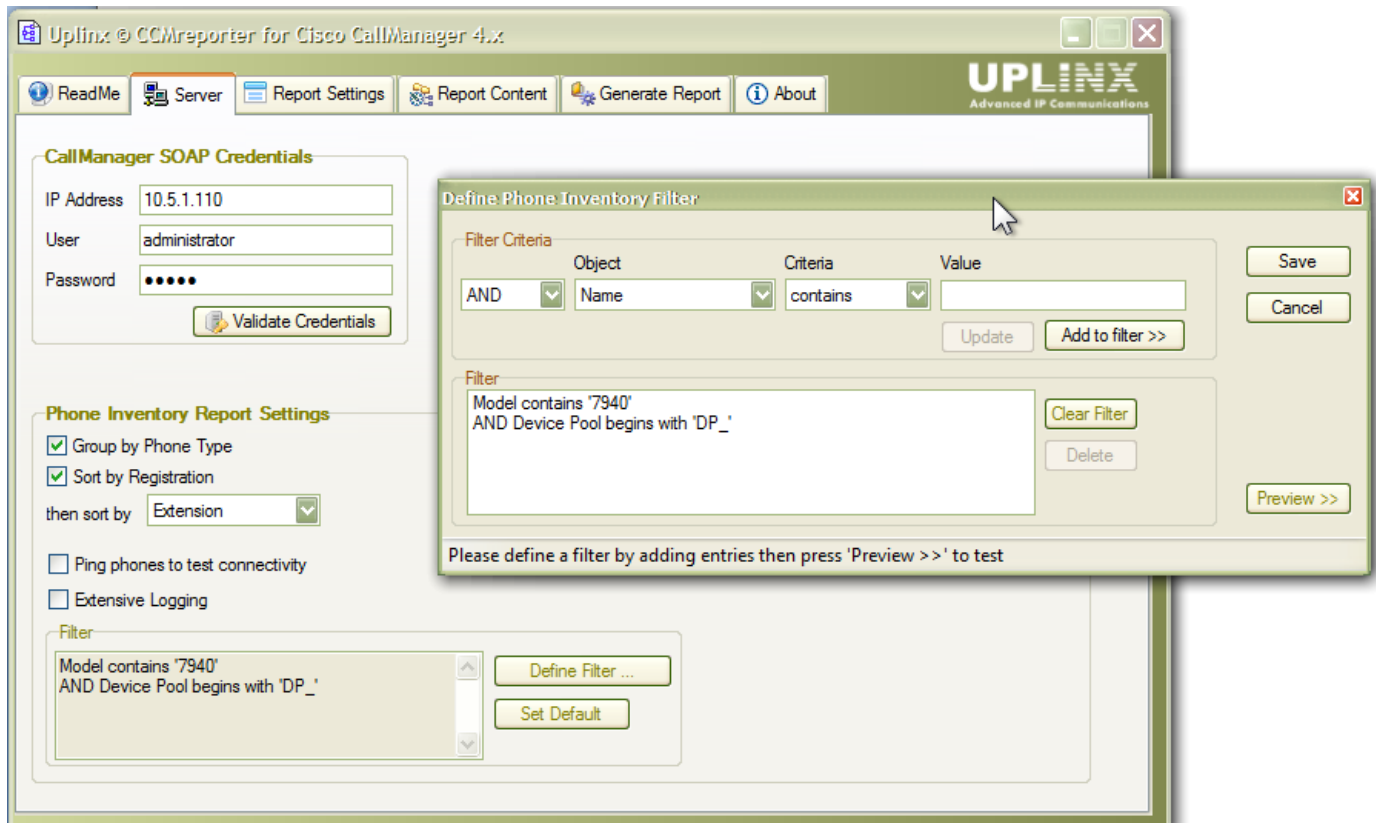


Report Generation Settings:

- Floating TOC for WEB: Ticking this tab will generate a navigation strip on the right side of the generated web report for easy navigation. Recommended: Enable.

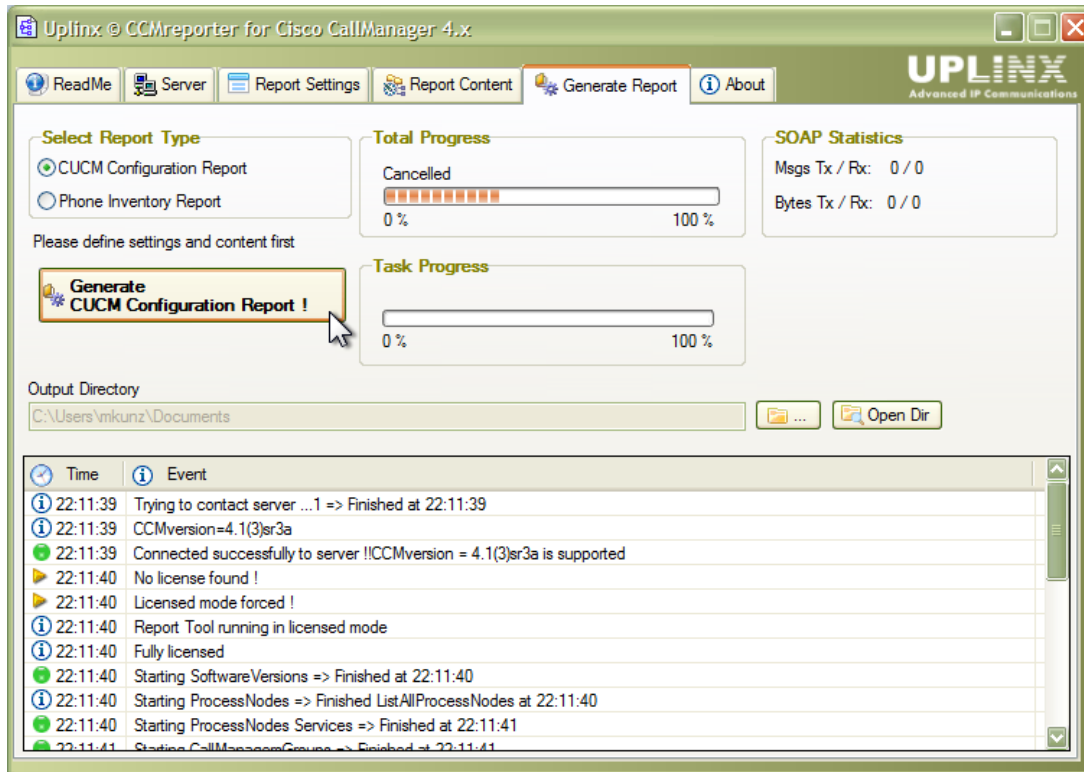
- Create compressed CHM report: Creates a CHM (Compressed HTML Help) file when the report is generated. Recommended: Enable.
- Add descriptions to the report. When ticked, this option adds a descriptive text to each object in the report. To customize this text, please refer to the section on “Customization”. Recommended: Enable.

Note: As of release 1.6c the **Phone Inventory report** can be run on a subset of phones defined by a filter. The filter allows setting a criteria based on Device name, extension, Phone description and device pool. Before generating the Phone inventory report select the filter and preview the phones included.



STEP 4: GENERATE THE REPORT

To generate the report, click the Generate button in the 'Generate Report' button. Before doing so, please make sure that you have connectivity to the server by using the "Validate Credentials" button in the 'Server' tab.



NOTE: GENERATING REPORTS DURING BUSINESS HOURS

During report generation AXL SOAP requests are sent to the Publisher, which processes the requests and sends back requested data to the Report Tool. These requests are throttled to reduce the impact on the Publisher's performance.

Based on our experience the CPU load on the publisher increases by 10% during report generation. So, if the CPU is about 20% on a publisher during normal operations, the report generation increases the CPU load to 30%. This has no business impact.

If the average CPU level is above 40% on the Publisher, it is recommended that reports be generated outside of business hours.

TROUBLESHOOT WORD REPORT ISSUES

ENABLING VBA MACROS IN WORD 2007

VBA macros need to be enabled and VBA needs to be installed in Word 2007 to automatically generate word reports.

To install VBA support: Start > Settings > Control Panel > Program and Features -- then select 'Office 2007' and click 'Change'. In the installer select 'Change' and in the component 'Office Shared Features' enable 'Visual Basic for Applications'

VERIFYING VBA AND MACRO SUPPORT IN WORD

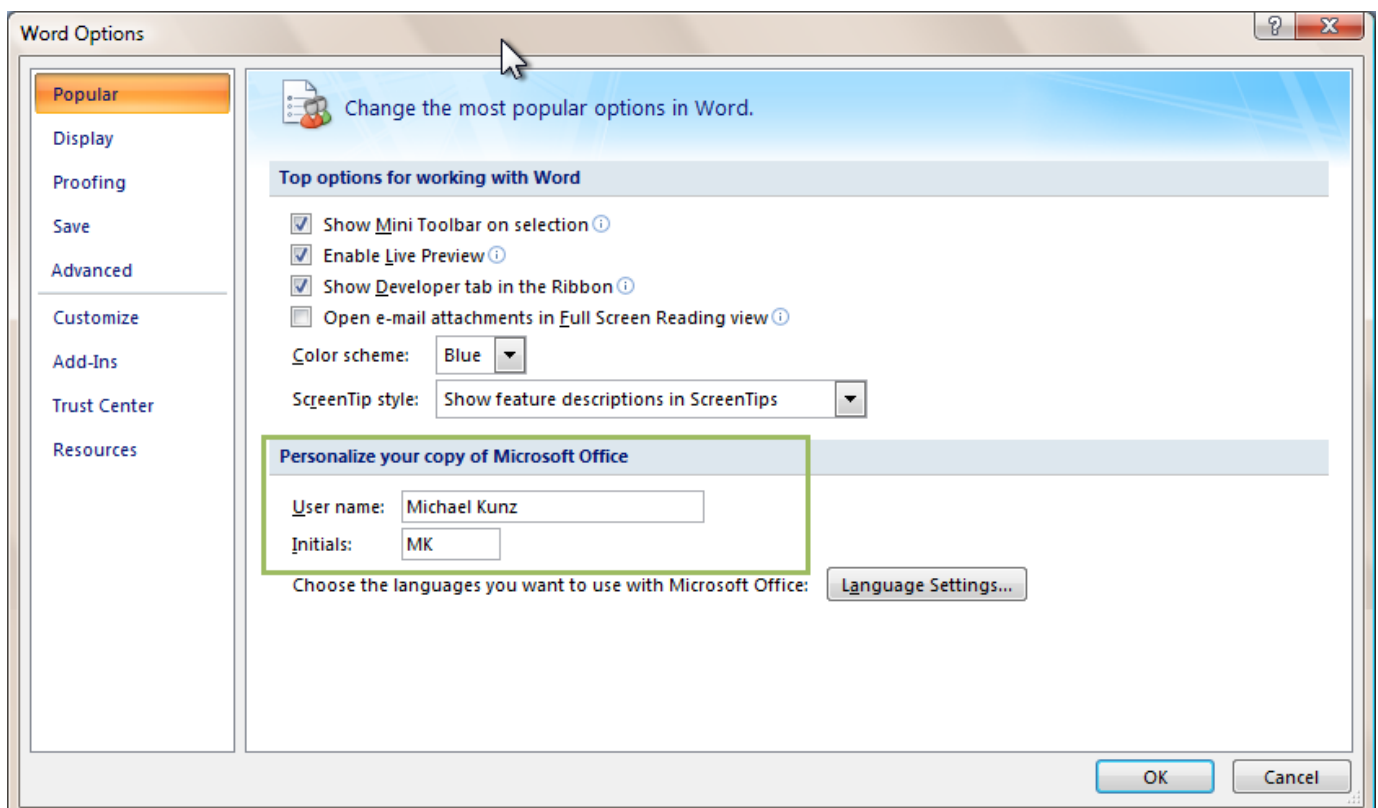
In the Report Tool on the tab Settings the button 'Test Report Style' allows the user to test the support of VBA and Macros even without a server. A synthetic report with similar Macros as the original report will be generated.

WORD PROBLEM WHEN NO USERNAME IS SET

Symptom: The Report Tool fails to generate the Word report even if VBA support is installed

Please check that a user name is set. To do this, click the 'Microsoft Office Button', click 'Word Options' >> Personalize your copy of Microsoft Office >> enter a user name and initials, and then click 'OK'.

For the non OEM version: click the 'Microsoft Office Button', click 'Word Options' >> Popular then "Personalize your copy of Microsoft Office".



This is further documented in: <http://kbalertz.com/948682/Error-message-command-Immediate-window-Visual-Basic-Error.aspx>

LARGE WORD REPORTS

The Word format report might have an issue if its length is more than 250 pages. Please note that this is not a Report Tool issue..

There is a problem with large Word reports when:

1. The HTML/CHM report has been generated properly
2. Word report generation fails
3. The test word report succeeds. A test report can be generated by clicking 'Test Report Style' on the 'Report Settings' tab.

To avoid potential issues with large Word reports, try one of the following:

1. Generate smaller, separate reports using automatic Word generation and include only some objects within each report. For example, instead of one large report, generate four separate reports for: (i) Phones; (ii) Users in detailed user mode; (iii) Device Profiles; and (iv) System settings.
2. Generate one large HTML report by disabling automatic Word generation in the options. Manually import the HTML file into the Word template and split the HTML file before importing it.

To manually import the HTML file:

1. Open the Word template in the folder C:\Program Files\CCMreporter\templates\<report_Type>\<Page_format>\<Template>.doc
2. Go to the section where it says #BODY#, delete this tag #BODY# and place the cursor there.
3. In the Word 2007 menu: Insert > Object > Insert from File import the HTML file. Click on the 'Format' button on the first page to reformat and adjust the content. Doing this will run some VBA macros to format the file.

If this doesn't work and an error message pops up – please email screenshot/google/adjust Word VBA scripts (if you do that we would love to hear what you did to improve the report tool further).

MANUALLY GENERATING A WORD REPORT FROM A HTML REPORT

After a HTML report has been generated, a Word report can be generated from the HTML report in the following way:

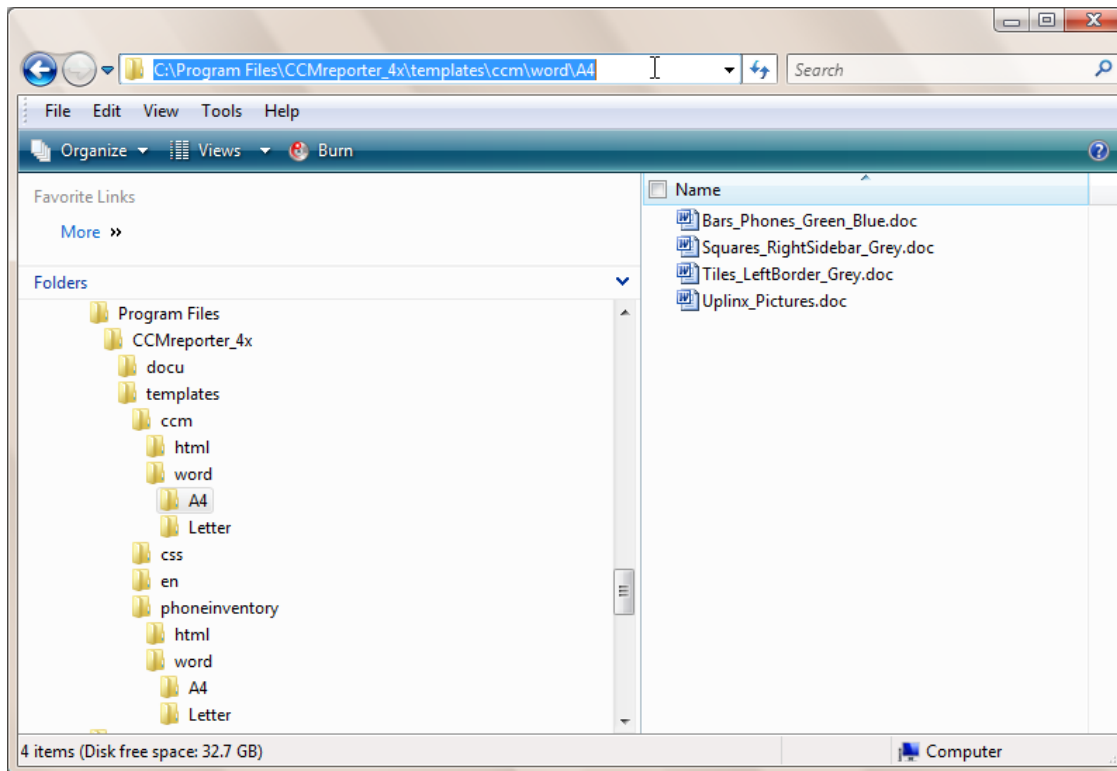
1. Open the Word template in the folder C:\Program Files\CCMreporter\templates\<report_Type>\<Page_format>\<Template>.doc
2. Go to the section where it says #BODY#, delete this tag ("#BODY#") and place the cursor there.
3. In the Word 2007 menu "Insert > Object > Insert from File" import the HTML file. Click on the "Format" button on the first page to reformat and adjust of the content. That should run some VBA macros and format the word report. This might take several minutes, depending on the size of the HTML file.
4. Save the report in the desired format, alter or print to PDF. (CutePDF is a free, excellent PDF converter).

CUSTOMISING YOUR OWN REPORT TEMPLATES

'Report Tool for Cisco Unified Communications' is template based for the generation of HTML, Word and CHM reports. The template based approach allows for the following branding options:

- Quickly generate reports based on your own company templates
- Use your company's color scheme, letter format and page layouts
- Use your own logo and front page
- Watermark pages
- Protect reports with secure PDF

Please modify the templates to suit your needs. The following Report Templates are currently available:



The following Phone

Word templates are located in the folder:

C:\Program Files\ReportTool\templates\<<report_Type>\word\A4 or Letter\

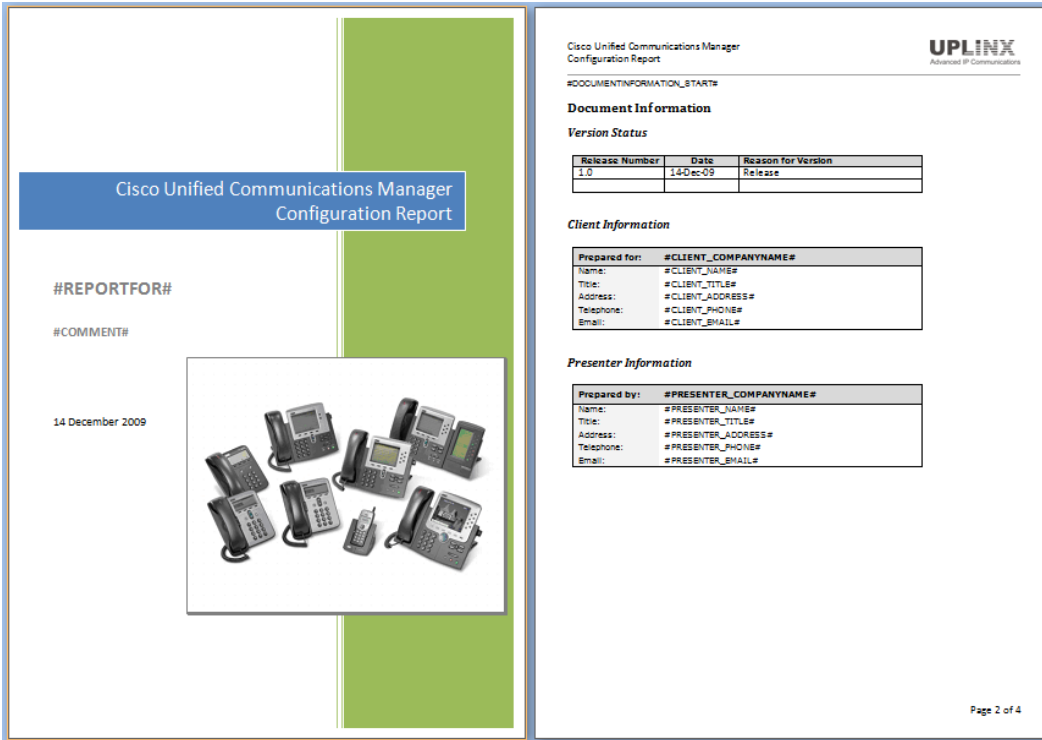


Figure 3: Template "Bars_Phones_Green_Blue.doc"

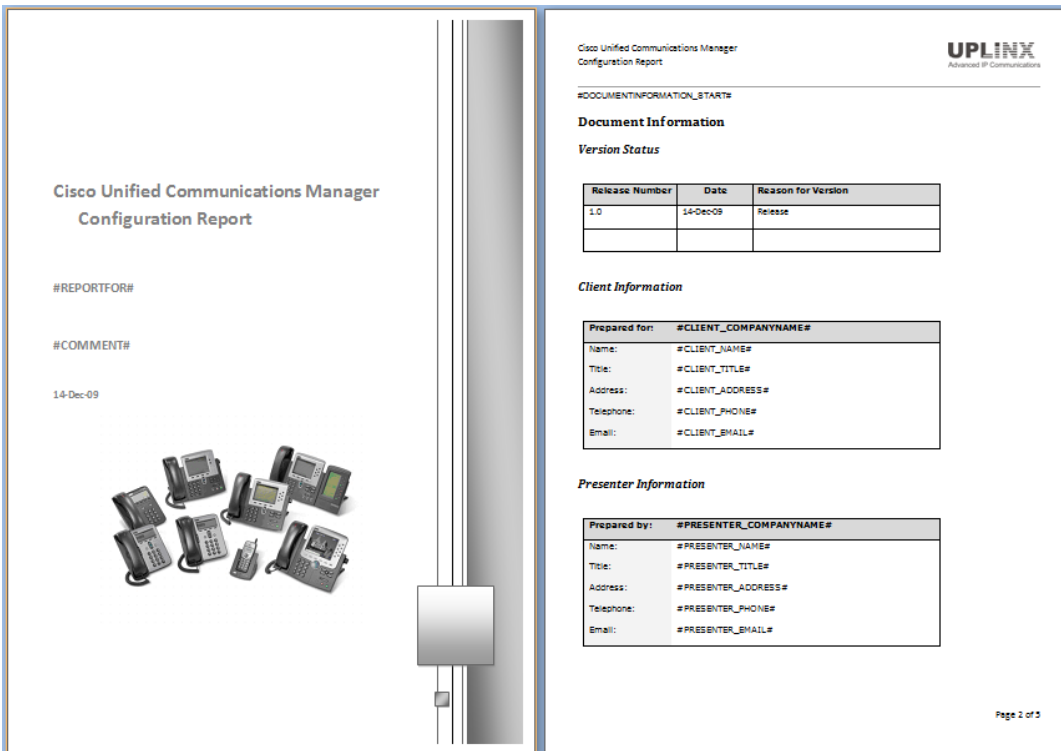


Figure 4: Template "Squares_RightSidebar_Grey.doc"

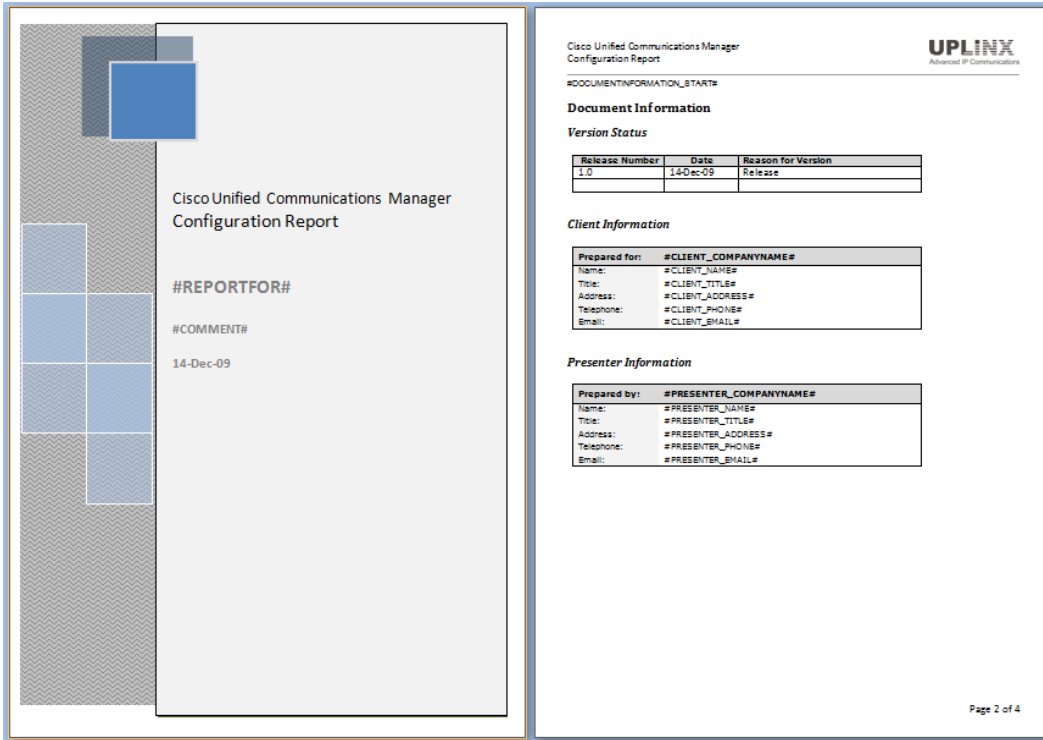


Figure 5: Template "Tiles_LeftBorder_Grey.doc"

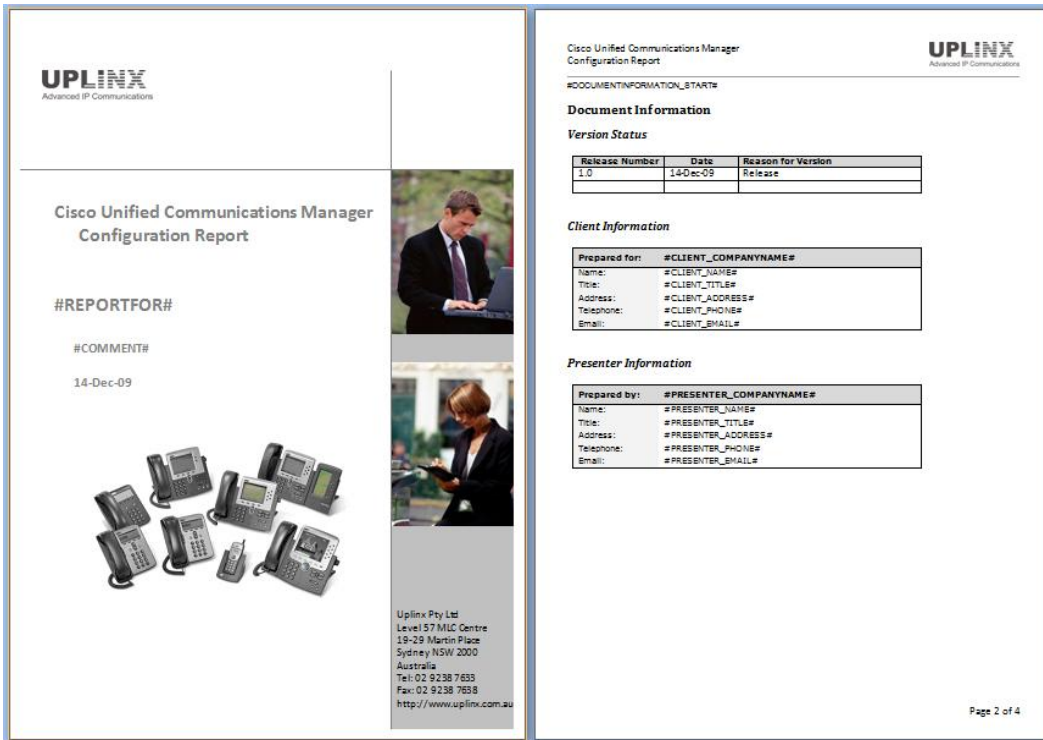


Figure 6: Template "Uplinx_Pictures.doc"

Please note that the following tags have to remain in there: HTML: #TOC#, #BODY#, #CSS# Word: Toc field, #BODY#, Page Breaks. It is recommended to modify these templates gradually to suit your needs.

When modifying format definitions, the "Generate Test Report" button on the template form in the tab 'Report Settings' allows the templates and formats to be quickly tested even when no server access available.

Page format A4 and Letter for WORD

Reports in A4 and Letter format can also be generated. Each template above is available as A4 and Letter format. When generating the report, the appropriate setting (either 'A4' or 'Letter') should be selected in the 'Report Format' list box in the 'Settings' tab.

Chapter descriptions

The description text files can be modified in C:\Program Files\<installDir>\templates\en\descriptions\. With a default install it is in: <C:\Program Files\CCMreporter\templates\en\descriptions>

STYLES FOR REPORTS

The generated word and web reports are based on CSS style definitions in the *.css files. This allows you to customize the reports to the Corporate ID by creating a new CSS file.

To create a new CSS file follow these steps:

1.) Copy an existing CSS file for example "Cisco CallManager.css" to "MyStyle.css"

2.) Use a text or CSS editor to change the values associated to the styles. Mostly you want to change:

- background-color (this is the background color of the table or the page)
- color (this is the text color)
- border (thickness and color of borders)
- text format definitions (font-weight:normal; font-size:8pt;)

3.) To test the new CSS format, link it to a sample HTML file as given in the folder. In the file "CCMreport_Smith Ltd.htm" in line 6:

```
link rel="StyleSheet" href="Blu Dark.css" type="text/css"
```

Set the href to your own definition. In our example that would be:

```
link rel="StyleSheet" href="MyStyle.css" type="text/css"
```

4.) Save and view "CCMreport_Smith Ltd.htm" in a browser and change the style until it matches.

5.) To generate a report with your style; in CCMreporter select the new style in the 'settings' tab. The CSS file will be merged into the report file.

CLI - COMMAND LINE INTERFACE

The Command Line interface for scripting is only available for the Report Tool 6, 7 and 8 and not for CCMreporter.

LICENSING

The following licenses are available:

- **Standard license:** The Standard license allows unlimited reports on one PC for one CallManager cluster.
- **Professional license:** The Professional license allows unlimited reports on one PC for any CallManager clusters.
- **Enterprise license:** The Enterprise license allows unlimited reports on any PC for any CallManager clusters.

MORE ABOUT LICENSING

To read more about product options, or to obtain a full license, please refer to http://www.uplinx.com.au/ReportTool_GetLicense.htm.

DEMO LICENSE - LIMITS

Without a license key, the application will be in demo mode and will print "no license" in every 3rd record. No other restrictions or limitations are applied and all functionality is available.

The 'Phone Inventory' report is limited to 30 phones in demo mode.

CONTACT US

Please refer to the relevant support and contact instructions below.

SUPPORT

For software bugs, please email the following information to **software@uplinx.com.au**:

- Zipped Log folder in C:\Users\\AppData\Local\CCMreporter\
- Screenshots if there is a popup error message
- Description of the problem and the urgency - the more specific information you can provide, the better

If there is a connectivity issue, please check first the log files for the error message and follow the troubleshooting procedures in this document.

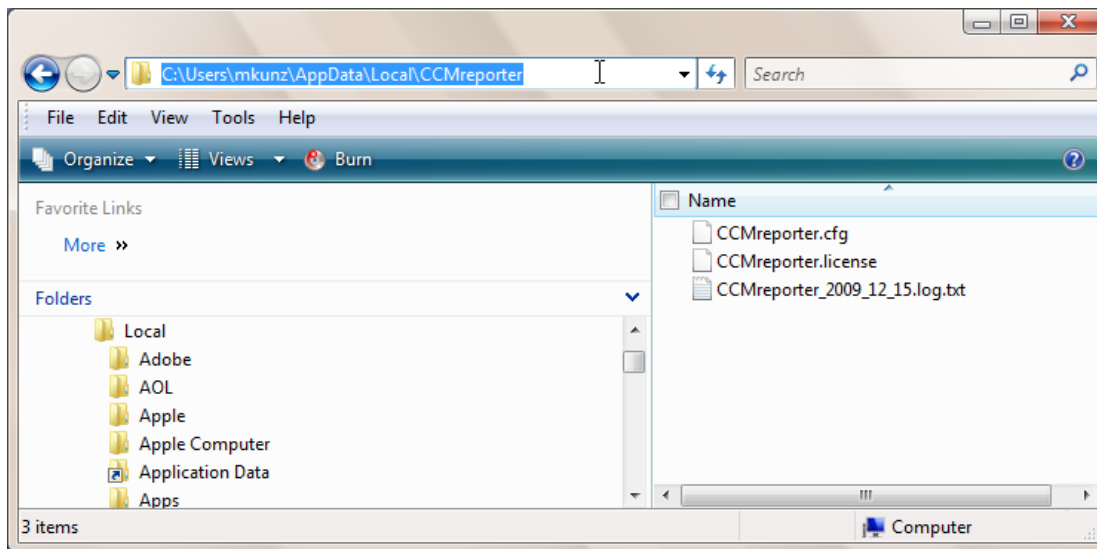
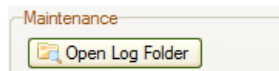


Figure 7: Log files, configuration files and the license are saved in C:\Users\\AppData\Local\CCMreporter\

By default, the log files are in the following directory: <LocalAppData> = C:\Users\\AppData\Local\CCMreporter\. This path might be dependent on the operating system and (if used) folder redirection. The configuration and log folder (=LocalAppData)

can be found in the 'About' tab with the button "Open log folder":



FEATURE REQUESTS

We encourage you to provide feedback and feature requests to **software@uplinx.com.au**. Your feedback will assist us to further improve our product.

LICENSING REQUESTS

Please follow the licensing instructions below to activate the full features of your purchased software.

1.) Download and install the software

Please update your software to the latest release by downloading it from:

http://www.uplinx.com.au/Report_Tool_Cisco_Unified_Communications.htm

2.) Obtain the license key

Please email to **licensing@uplinx.com.au** the following information, to enable us to generate the license key for you:

- Hardware ID (HID): The HID is a unique serial number of your PC and can be found on the 'About Tab' within the Report Tool. Irrespective of your license type, please always email the HID to us.
- IP address of the callmanager (only required if you purchased a Standard License)

3.) Insert the license key

We will email the license file to you within 24 hours after received the necessary details from you. Once you have received the license key, please insert the license key file in the 'About' page by clicking the 'Add License' button to activate the full features of the tool.

RELEASE NOTES

CURRENT VERSION

Version: 1.6d (Minor update) /3 October 2010

Bug fixes:

- Phone Inventory:
 - Some releases in 4.2 or later caused an SQL exception in the phone retrieval

Added and changed features:

- Added device pool for phones in Phone Inventory report

PAST VERSIONS

Version: 1.6c (Minor update) /7 September 2010

Bug fixes:

- Report Tool:
 - Fixed a hunt list report issue which occurred if there are no hunt list members

Added and changed features:

- Added filter options for Phone Inventory report.

Version: 1.6b (Minor update) /7 Feb 2010

Bug fixes:

- Report Tool:
 - Fixed Word generation. Word could crash on large reports on some machines with a fault in wwlib.dll (part of Word).

Added and changed features:

- Added button to open config and log folder

Version: 1.6a (Minor update) /21 December 2009

Bug fixes:

- Phone Inventory Tool:
 - Fixed unregistered issue – sometimes phones shown as unregistered when registered to another cluster member

Version: 1.6 (Major update) /15 December 2009

Bug fixes:

- Phone Inventory Tool:
 - Fixed chart axis issue on many phone types.
 - Fixed support for 7905 phones

Added and changed features:

- NEW: Added support for IE 8 and Windows Seven.
- NEW: Added more template support:
 - Customizable borders per report
 - A4 or Letter format
 - Added 4 templates for reports to choose from
 - Added Document Information section to Word report
- Phone Inventory Tool:
 - NEW: Changed to XML retrieval
 - NEW: Added Turkish locale support

Version: 1.5a/ 25.Feb 2009

Bug fixes:

- On some Service Releases in 4.2 the CCM version is reported as CCM4.2.3SR (prepending CCM) - the version detection algorithm has been updated to reflect this changed behaviour
- Users with locale not set to 'English United States' or none have not been reported
- Version notifier failed to notify

Added and changed features:

- NEW: Added Mark of the Web (MOTW) to generated web pages to avoid displaying a security warning in Internet Explorer
- NEW: Phone Inventory Report: Added quotes for fields which contain , / or \

Version: 1.5 / 7. Jan 2009

Bug fixes:

- Media Resources now listed

Added and changed features:

- NEW: CUCM Report: Added reporting object for Route Filter
- NEW: CUCM Report: Added support for 4.3
- NEW: Phone Inventory Report: Added User Locale support. Languages supported are: English, German, Norwegian, Dutch, French, Italian, Spanish, Chinese, Japanese, Arabic.

Version: 1.4b / 18. August 2008

Bug fixes:

- ATA now listed

Added and changed features:

- Added new visual style
- Added new license buttons

Version: 1.4 / 6. July 2008

Bug fixes:

- Some CCM releases (4.1.3ES99) return non standard delimiter - added workaround

Added and changed features:

- Added Compressed HTML Help output format(CHM)
- Added chapter descriptions
- Added option to defer reformatting in Word to reduce time on site
- Phone Inventory Tool: Added support for Cisco 7937 conference phone

Version: 1.3b / 22. June 2008

Bug fixes:

- Phone Inventory Tool: fixed support for ATA, 7920
- Phone Inventory Tool: a RIS API error could occur on some CCM releases

Added and changed features:

- Phone Inventory Tool: Added Timestamp to output (Timestamp of unregistered phones missing due to Cisco API bug)
- Phone Inventory Tool: Added support for 7921

Version: 1.3 / 13. May 2008

Bug fixes:

- MRGL lists all MRGs members
- Phone Inventory Tool: could not parse neighbors when empty on 7971 phones
- Phone Inventory Tool: excluded polycom 7935 and IP communicator from collection as not supported
- removed application exit when generating sample report
- Dramatic performance improvements when generating Word report

Added and changed features:

- Major rework to base reports on CSS templates and allow style to be user defined and selected per report
- Updated all associated documentation to reflect style changes
- Only Word 2007 is supported to generate word documents as Word 2003 has limited support for large tables and CSS
- Changed demo license to allow full output but print "no license" in every 3rd record

Version: 1.2c / 25. April 2008

Bug fixes:

- Analog gateways VG248, VG224 now reported under gateway section
- fixed bugs in Phone Report Tool
- removed extensive logging which caused performance issues
- Logo fix for display mode windows classic which did not display the background properly

Added and changed features:

- Phone Report Tool: Added GUI option to choose Sync or Async request for phone web pages
- Cleaned up directory structure under Program folder
- Report output can now be on any drives (before only C: drive)
- Added program shortcut to desktop

Past version: 1.2a-b / 21. April 2008

Bug fixes:

- fixed bugs in Phone Report Tool

Added and changed features:

- Phone Report Tool: Async implementation with no timeout problem and high performance
- Phone Report Tool: Added status field to output
- Design changes to GUI and installer
- Phone Report Tool: asks to open CSV file
- Installer: Check for installed version and preserves license file on uninstall for new version
- Version notifier added to check online on startup for newer version

Past version: 1.1 / 17. Oct 2007

First public release. Please see the [datasheet](#) for features.

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