# Installing WMSNET & WMSPDA

#### **Revision History**

Revision Date	Ву	Description
26. Mar. 2006	NJ	Creation date
2 Oct 2009	MF	<ul> <li>Modification date</li> <li>Documentation Upgraded from WMSnet415 to WMSnet500.</li> <li>Program upgraded from WMSnet version 4.1.5 to version 5.0.0.</li> <li>Program conversion from Visual Studio 2003 to Visual Studio 2008.</li> <li>To add Print &amp; Import functions to Inquiry Module and fix bugs.</li> <li>To upgrade .NET framework 1.1 to 3.5.</li> </ul>
18 Oct 2009	MF	<ul> <li>To further explain Section 10 - WMSnet500_Registration.reg" File.</li> <li>To further explain Section 11 - "Web.config" File.</li> </ul>
8 Nov 2010	MF	<ul> <li>Upgraded WMSNET web control 1.0 to web control 3.5.</li> <li>Remove section 6 : "webctrl_client" for web control 1.0.</li> <li>Program upgraded from Visual Studio 2008 to Visual Studio 2010.</li> <li>Added the install guide for WMSPDA.</li> </ul>
26 Apr 2011	MF	<ul> <li>Upgraded .NET framework 3.5 to 4.0.</li> <li>Upgraded Crystal Report to Crystal Report 2010. Needed the Crystal Report 2010 32-bit and 64-bit Runtime for deployment on different OS.</li> <li>Remove section 7 : Creating "WMSnet500" Virtual Directory. The virtual directory will be created automatically during program setup.</li> <li>Remove section 11 : Creating "WMSnet" Virtual Directory. Because this section actually refers to section 7.</li> </ul>

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# 1. Introduction

WMSNET is an ASP.NET application for accessing CRISTALWMS reports from a web browser. There are several versions of the program, identified as WMSNET40, WMSNET415 etc. The latest version is WMSnet500 (version 5.0.0).

WMSNET must be installed on a PC with the following characteristics:

- The WMSNET machine must be able to access the "CRISTALWMS" SQL Server database via ODBC. The WMSNET application can be installed on the same machine running the SQL Server database, or on a separate machine.
- The WMSNET machine must be running Internet Information Services 5.0 or higher. This means that only PCs running the following operating systems can be used:
  - Windows 2000 Workstation/Server
  - Windows XP Professional
  - o Windows 2003 Server

This document describes the installation of WMSNET application on a clean machine (i.e. with only the operating system installed).

The installation files referenced in this document are in the subdirectory package "WMSnet500" distributed with this document.

# 2. Internet Information Services (IIS)

IIS 5.0 or higher must be installed and running before the .NET Framework can be installed.

To install IIS, execute the Start | Control Panel | Add or Remove Programs program option:

rs   🛄 -	
rs 🔛 🛪	💌 🋃 Go
(Charlenge)	💌 🄁 Go
.M7	
*	Comments
cessibility Options d Hardware	Adjust your computer settings for vision, hearing, and mobility Installs and troubleshoots hardware
d or Remove Programs ministrative Tools tomatic LIndates	Install or remove programs and Windows components. Configure administrative settings for your computer. Set up Windows to automatically deliver important updates
antGo Connect	Configures settings for AvantGo servers.
te and Time play Id Fast	Set the date, time, and time zone for your computer. Change the appearance of your desktop, such as the backgro Microsoft Find Fast (tm) content indexer
	I Hardware or Remove Programs inistrative Tools comatic Updates antGo Connect ce and Time play d Fast d Fast

In the Add or Remove Programs dialog window, click the option Add/Remove Windows Components.

When the **Windows Components Wizard** dialog box is displayed, scroll through the "Components" list and tick the "**Application Server**" checkbox. Click the **Details** button to select the Options.

Windows Components Wizard	×
Windows Components You can add or remove components of Windows.	t
To add or remove a component, click the checkbox. A shad part of the component will be installed. To see what's include Details. Components:	ed box means that only ed in a component, click
Accessories and Utilities	4.5 MB
	24.6 MB
Certificate Services	1.4 MB
E-mail Services	1.1 MB
	22.0 MB 🔳
Description: Includes ASP.NET, Internet Information Service Application Server Console.	es (IIS), and the
Fotal disk, space required: 14.2 MB Space available on disk: 63891 / MB	Details
< <u>B</u> ack <u>N</u> ext >	Cancel Help

Tick "**ASP.NET**" check box and make sure that the "Internet Information Services (IIS)" check box is also selected.

Application Server	×
To add or remove a component, click the check box. A shaded box m of the component will be installed. To see what's included in a compor	neans that only part nent, click Details.
Sub <u>c</u> omponents of Application Server.	0.0 MB
✓ Sea ASP.NET	0.0 MB
Enable network COM+ access	0.0 MB
Enable network DTC access	0.0 MB
✓ ¥ Internet Information Services (IIS)	18.1 MB
🗌 🚅 Message Queuing	6.5 MB
	7
Description: Allows this computer to run ASP.NET applications.	
Total disk space required: 14.2 MB	Dietoile
Space available on disk: 63890.7 MB	Dictolis
ОК	Cancel

Windows Components Wizard		×
	Completing the Windows Components Wizard You have successfully completed the Windows Components Wizard.	
0	To close this wizard, click Finish.	
	< Back <b>Finish</b>	Help

Once IIS has been installed, the PC will effectively become a Web Server.

The **Administrative Tools** program under "Control Panel" will feature a new option called "**Internet Information Services**" that will allow us to configure the newly created Web Server.



🐂 Administrative Tools			-	
<u>File Edit View Favorites I</u> d	ools <u>H</u> elp			2
🔇 Back 🔹 🕤 👻 🌮 Search	h 🜔 Folders 🛛 🎹 🗸			
Address 🦏 Administrative Tools			▼ →	Go
	▲ Name ▲	Siz	e Type	*
File and Folder Tasks 🔗	Component Services	2 K	B Shortcut	
- Deserve this file	🗐 Computer Management	2 K	B Shortcut	
	Data Sources (ODBC)	2 K	B Shortcut	
🔯 Move this file	📕 Event Viewer	2 K	B Shortcut	
Copy this file	Internet Information Services	2 K	B Shortcut	
Publish this file to the Web	Local Security Policy	2K	B Shortcut	•
Manages IIS, the web server for Inte	rnet and intranet web sites.	1.62 KB 💽 N	1y Computer	

We will execute the **Internet Information Services** program to create new virtual directories in a later section.

# 3. Install MDAC 2.6 or higher

MDAC (Microsoft Data Access Components) 2.6 or higher is required by WMSNET.

If the PC is running Windows 2003 Server or Windows XP Service Pack 2, MDAC 2.8 will already be installed.

If the PC is running any other operating system, you can run the **MDAC Component Checker** to see what version of MDAC is already installed.

You can run the MDAC Component Checker from "WMSnet500\MDAC\Component Checker\CC.exe" executable in the WMSnet500 package.

🔽 Compone	ent Checker Version 2.	0		_101
Eile View I	Help			
Co	mponent Checker – Ch	oose Analysis Type		
<b>₽<u>■</u>9</b> ≜ <b>∟</b>	<ul> <li>Perform analysis release version.</li> </ul>	of your machine and autom	atically determine the	OK Cancel
	C Perform analysis	against a selected version.	<u></u>	
	C Scan your machir	ne. Do not perform analysis	•	
Tree: Summar	y Report	Items: 13	Operation: Current ana	lysis complete

Select the "Perform analysis of your machine and automatically determine the release version" option and click **OK**.



If the Component Checker reports that the MDAC version is lower than 2.6, please install **MDAC 2.8** on the machine. MDAC 2.8 can be installed from "WMSnet500\MDAC\MDAC\_28\MDAC\_TYP.exe" executable file in the WMSnet500 package.

# 4. Microsoft .NET Framework 4.0

The .NET Framework 4.0 full package setup program can be found in the WMSnet500 package : "WMSnet500\Net Framework 4.0\dotNetFx40\_Full\_x86\_x64.exe".

The PC will need to be restarted after the .NET Framework service pack has been installed.

#### **Reminder**

The .NET Framework 4.0 full package must be installed only after IIS has already been installed. If IIS is installed after the .NET Framework, the ASP.NET application will not be runnable.

# 5. Crystal Reports 2010 Runtime Package

It is mandatory to install the Crystal Reports 2010 Runtime Package. There are 2 runtime packages in the folder. 32\_bit and 64-bit are for different Operating System respectively.

You can run it from:

"WMSnet500\_Deployment Package\Crystal Reports Runtime 2010\CRRuntime\_32bit\_13\_0.msi"

# 6. Open Port 80 in Windows Firewall

If the web server machine is running on Windows XP Service Pack 2, Windows Firewall will already be running on the machine, and the firewall program will block other computers from accessing the IIS web service on the machine.

It is necessary to open TCP port 80 in the firewall.

Execute the Windows Firewall program from the Control Panel.



By default, the Windows Firewall will be **On**.

Click on the Exceptions tab.

Windows Firewall is bl programs and service: o work better but mig Programs and Service	ocking incoming ne s selected below. An ht increase your sec s:	twork connections, dding exceptions all urity risk.	except for the ows some programs
Name			
<b>☑</b> 5656			
🗹 ActiveSync Appl	cation		
🗹 ASRDisp			
Atomic Clock Po	it 13		
BitTorrent			
BitTorrent Port 6	381		
🗹 Bonjour			
🗹 btdownloadgui			
CEMGR Module			
🗹 cerhost			
Check for New D	eliveries		<u> </u>
Add Program	Add Port	Edit	Delete
<u></u>			
Display a potificati	on when Windows I	Firewall blocks a pro	ar aro
<ul> <li>Display a <u>n</u>ouncau</li> </ul>		r ilewaii biocks a pro	gram

Click on the **Add Port...** button to add port 80 into the exceptions list. Note that you can assign any text in the "Name" prompt, but I find it useful to include the port number in the name.

Add a Port				×
Use these settings number and protoc want to use.	to open a por :ol, consult the	t through Wind documentatio	lows Firewall. To n for the progra	o find the port m or service you
<u>N</u> ame:	Web Service	e Port 80		
Port number:	80			
	⊙ <u>I</u> CP	⊂ <u>u</u> dp		
What are the risks	of opening a r	port?		
Change scope	1	[	ок	Cancel

The new exception will now appear in the "Programs and Services" list:

Windo	ws Firewall				
General	Exceptions	Advanced			
Windov progran to work <u>P</u> rogran	vs Firewall is ns and servic better but mi ns and Servic	blocking incoming r es selected below. ght increase your s :es:	network conner Adding excepti ecurity risk.	ctions, excep ons allows s	ot for the ome programs
Name	r.				•
	PN-1 SecuRe PN-1 SecuRe eb Service P indows Mess indows® Net indows® Net indows® Net indoo! FT Serv indoo! Messer	mote/SecureClient mote/SecureClient ort 80 enger to-Peer Grouping Meeting® /er iger	SDS agent service		
Add	P <u>r</u> ogram	Add P <u>o</u> rt	] <u>E</u> dit s Firewall block	s a program	<u>D</u> elete
<u>What a</u>	re the risks o	allowing exception	<u>18?</u>		
				OK	Cancel

# 7. Install "WMSnet500" Setup Package

The installation files for the WMSnet500 application are located in the "WMSnet500\_Deployment Package\WMSnet500\_Setup" directory. Click the "Setup.exe" file to start the installation.



Select Installation Address
The installer will install WMSNET to the following web location.
To install to this web location, click "Next". To install to a different web location, enter it below.
Site:       Default Web Site       Disk Cost         ⊻irtual directory:       WMSNET         Application Pool:       ▼
Cancel < <u>B</u> ack <u>Next</u> >



You can examine the contents of the "C:\Inetpub\wwwroot\WMSNET" directory to see the files that have been installed.



Please take note of 2 important files:

- C:\WMSnet500\Registry\WMSnet500\_Registration.reg
- C:\WMSnet500\Web.config

If you have installed the WMSNET application in the same machine as the one running the SQL Server service for the "cristalwms" database instance, you do not need to make any modifications to these 2 files.

However, if the SQL Server machine is a separate machine from the web server machine, you must use a text editor to edit both files to configure the IP address of the SQL Server machine.

These files are described in more detail in the following sections.

### 8. "WMSnet500\_Registration.reg" File

This file is created as "C:\WMSnet500\Registry\WMSnet500\_Registration.reg" on the web server.

The "WMSnet500\_Registration.reg" file is used to create 2 ODBC entries required by the WMSnet500 application. The ODBC entries are:

ODBC Identifier	SQL Server Login
wms_chk	wmschk
wms_dbo	wmsdbo

The settings in the default registration file assumes that the SQL Server machine is the same one as the web server. As such, the IP address of the SQL Server is coded as "127.0.0.1".

If the SQL Server machine is separate from the web server, you must edit the following section in the registration file:

```
[HKEY_LOCAL_MACHINE\SOFTWARE\Microsoft\MSSQLServer\Client\ConnectTo]
"WMS"="DBMSSOCN,<u>127.0.0.1</u>,1433"
"DSQUERY"="DBMSSOCN"
```

and replace the "127.0.0.1" with the correct IP address of the SQL Server.

Also, the ODBC entries created assumes a standard CRISTALWMS database configuration.

Parameter	Standard Value
Database name	cristalwms
1 <sup>st</sup> SQL Server Login	wmschk
2 <sup>nd</sup> SQL Server Login	wmsdbo

If the database name and SQL Server logins in your setup are not the defaults, you will need to replace all occurrences of these names with their correct values.

Finally, notice that the registration file has 2 sections with this section names:

- [HKEY\_LOCAL\_MACHINE\Software\CRiSTAL Solutions\ CRISTAL Warehouse Management System\Network Connection]
- [HKEY\_LOCAL\_MACHINE\Software\CRiSTAL Solutions\ CRISTAL Warehouse Management System\Miscellaneous Settings]

The string "CRISTAL Warehouse Management System" in the section names references a registry key. This string is also recorded in the "Web.config" file (described in the next section) to direct the WMSNET application on which registry key to use when retrieving the SQL Server connection settings from the registry.

You can create a different registry key by replacing the text "CRiSTAL Warehouse Management System" in these section names. If you do this, you must also modify the Web.config file to point to the new section.

#### Registering the Registration File

After you have edited and saved the changes in the registration file, you **must** double click on the registration file in Windows Explorer to register its contents. The WMSNET application will not run correctly if the registry values are not updated into the Windows Registry of the web server machine.

🔊 OD	BC Da	ata Sourc	e Adminis	trator				? 🔀
User	DSN	System DS	N File DSN	I Drive	ers   Tracing	] Connec	tion Poo	ling About
Sys	tem Da	ata Sources	:					
N	ame		Driver					Add
W	ms_chk		SQL Server					Bemove
	ns_upu	,					_	TTEINOVE
								Configure
<	1					>		
1							9	
An ODBC System data source stores information about how to connect to the indicated data provider. A System data source is visible to all users on this machine, including NT services.								
			OK		Cancel	Ap	ply	Help

Once register is done, open the ODBC Data Source Administrator windows as shown above and check that the 2 entries are correctly created. To open the ODBC Data Source Administrator windows, go to "Control Panel | Administrative Tools | Data Sources (ODBC)". Next run the database connectivity test by clicking on the Configure button.

Microsoft SQL Server	DSN Configuration
Selact a diver its off Access of a diversion off Access of a diversion of Access of Access of Access of Access of a diversion of Access of Access of a diversion of Access of Access of Access of Access of Access o	This wizard will help you create an ODBC data source that you can use to connect to SQL Server. What name do you want to use to refer to the data source? Name: wms_chk How do you want to describe the data source? Description: Cristal Warehouse Management System Connectivi Which SQL Server do you want to connect to? Server: 127.0.0.1
	Finish Next > Cancel Help

Microsoft SQL Server	DSN Configuration
Selaci a diver w	How should SQL Server verify the authenticity of the login ID?
olt Access olt Access olt Base T bir poolt ForAri bir poolt ForAri	<ul> <li>With Windows NT authentication using the network login ID.</li> <li>With SQL Server authentication using a login ID and password entered by the user.</li> </ul>
Coolin Pare Antropolit Tex SUL Serve	Client Configuration.
	Connect to SQL Server to obtain default settings for the additional configuration options.
	Password:
	< Back Next > Cancel Help

Enter the correct IP address for the SQL Server and the SQL Server Login ID and password as shown in the above diagrams. Click the Next button once done.

ODBC Microsoft SQL Server Setup	$\mathbf{\times}$
A new ODBC data source will be created with the following configuration:	
Microsoft SQL Server ODBC Driver Version 03.85.1132	~
Data Source Name: wms_chk Data Source Description: Cristal Warehouse Management System Connectivity Server: 192,168.5.4 Database: (Default) Language: (Default) Translate Character Data: Yes Log Long Running Queries: No Log Driver Statistics: No Use Integrated Security: No Use Regional Settings: No Prepared Statements Option: Drop temporary procedures on disconnect Use ANSI Quoted Identifiers: Yes Use ANSI Null, Paddings and Warnings: Yes Data Encryption: No	
	$\sim$
Test Data Source OK Cance	!

Click the Test Data Source button as shown above to run a database connectivity test.



If the connection is successful, you will see the above diagram - "TESTS COMPLETED SUCCESSFULLY". Repeat the tests for both the 1<sup>st</sup> & 2<sup>nd</sup> SQL Server Login.

# 9. "Web.config" File

This file is created as "C:\WMSnet500\Web.config" in the web server.

All user definable settings are defined under the block:

<appSettings>

</appSettings>

All parameters are listed as lines in the following format:

<add key="Parameter Name" value="Parameter Value" />

You can only change the "Parameter Value". Do not alter any "Parameter Name".

To change the "Parameter Value" open the Internet Information Services and right click on the virtual directory of WMSnet500.

ile Action View Help			
• → 🗈 📧 🗙 🗳 🔂 🛃 (	2 💷 🔍 🕨 💷 🗉		
Internet Information Services Win2003 (local computer)  Web Sites  Win2003 (local computer)  Web Sites  Win2003 (local computer)  Web Sites  Win2003 (local computer)  Win2005 (local computer)  Win200	Name App_Data App_Data bin Deployment Not Graphics Copy of Default.aspx.des Default.aspx.de	Path is aspx igner.vb c designer esx ib	Status

HTTP Headers	Custom Errors	ASP.NET
Virtual Directory	Documents	Directory Security
When connecting to thi	s resource, the content should cor	me from:
💽 A	directory located on this compute	r
○ A	share located on another comput	er
○ A	redirection to a URL	
Local Path:	WMSnet500	Browse
Read     Write     Directory browsing     Application Settings	✓ Index this re:	source
Application name:	wmsnet500	Remove
Starting point:	<default\wmsnet500< td=""><td>Configuration</td></default\wmsnet500<>	Configuration
Execute Permissions:	Scripts only	
Application Protection:	Medium (Pooled)	Vnload

Click on ASP.NET tab in the properties windows and then the Edit Configuration button.

WMSnet500 Properties	? 🗙
Virtual Directory [ HTTP Headers	Documents Directory Security Custom Errors ASP.NET
Microsoft ASD not	
ASP. LEL	
ASP.NET version:	2.0.50727
File location:	C:\WMSnet500\web.config
File creation date:	2009-10-12 01:43:58
File last modified:	2009-10-07 17:21:25
	Edit Configuration
ОК	Cancel Apply Help

Name	Connection Parameters
LocalSglServer	data source= \SQLEXPRESS;Integrated Security=SSPI;AttachDBFilename= DataL
1	
<u> </u>	Add Edit Remove Reset
pplication settings	
Key	Value
Default Sender	
Login DSN	wms_chk
Login UID Deteksee DCN	wmschk
Database DSN Database UID	wing_abo
	127.0.0.1
Server	
Server Login PWD	IFHQUKNZ37QQQZJP47YIQQXUTWNUPLZUBIK&ZX/MQ=FVMLbUbBbqDml5oi/
Server Login PWD Authenticate ID	IIFHQUKnz37QQQZ0F47YfgQXUFWNUpLZUBKszX/mQ=FymLb05BpqDmboj7 3.0
Server Login PWD Authenticate ID	In-Hquknzsruuuup4rrigouxui whupczubikszx/mu=FymCb0bBpqUmboj/     3.0

#### Important Note

The parameter values in the Login DSN, Login UID, Database DSN, Database UID and Server must match the values entered in the ODBC settings as shown in the diagram below. Otherwise the WMSnet500 application will not work.

ASP.NET Conf	iguration Settings 🛛 👔 🔀	
General Custom Errors	Authorization Authentication Application State Management Locations	
Connection string manag	per	
Name	Connection Parameters	
Local5qlServer	data source= ISQLEXPRESS.integrated Security=SSPLAttachDBFilename=DataDi	
		🖉 ODBC Data Source Administrator 🛛 🔞
		User DSN System DSN File DSN Drivers Tracing Connection Pooling About
<		System Data Sources:
Application settings	Add Edk Remove Reset	Name Driver Add wms_chb SQL Server Remove Remove
Key	Value	Continue
Default Sender Login DSN Login UID Database DSN Database UID Server	mma_chk	
Login PWD Authenticate ID	5HqOKnZ97QQQ2Jp47YigoJX0TwN0pCZv8KvZX/mQ=FymCb058pqDml5oj7 3.0	<u>×</u>
<	Add Edk Remove Reset	An ODBC System data source stores information about how to connect to the indicated data provider. A System data source is visible to all users on this machine, including NT services.
Path: FUJITSU/Default We	b Site/vmanet500Logwi] OK Cancel Apply Help	OK Cancel Apply Help

#### <u>Server</u>

This key is used to reference the IP address of the SQL Server.

The default value for this key is "127.0.0.1", as the default installation assumes that the web server is running on the same machine as the SQL Server.

Edit the value to the appropriate IP address if the SQL Server is on a different machine. Note that the IP address you specify must be in agreement with the IP address you specify in the "WMSnet500\_Registration.reg" file.

Normally, the value of the **Server** key is the only one that you will need to edit. In fact, you do not need to edit this at all if your web server is the same machine as the SQL Server.

However, if you have a special network setup that required changes to other parameters in the "WMSnet500\_Registration.reg" file, you may also need to modify the keys:

- Login DSN
- Login UID
- Database DSN
- Database UID

in the "Web.config" file.

#### Login DSN

This key is used to reference the ODBC name for the 1<sup>st</sup> SQL Server Login defined in the "WMSnet500\_Registration.reg" file.

The default value for this key is "wms\_chk".

#### Login UID

This key is used to record the SQL Server Login that is associated with the "Login DSN".

The default value for this key is "wmschk".

#### Database DSN

This key is used to reference the ODBC name for the 2<sup>nd</sup> SQL Server Login defined in the "WMSnet500\_Registration.reg" file.

The default value for this key is "wms\_dbo".

#### Database UID

This key is used to record the SQL Server Login for the 2<sup>nd</sup> SQL Server Login defined in the "WMSnet500\_Registration.reg" file.

The default value for this key is "wmsdbo".

#### ProductName

The default value for this key is "CRiSTAL Warehouse Management System". This value is referenced in the "WMSnet500\_Registration.reg" file in the section names:

- [HKEY\_LOCAL\_MACHINE\Software\CRiSTAL Solutions\ CRiSTAL Warehouse Management System\Network Connection]
- [HKEY\_LOCAL\_MACHINE\Software\CRiSTAL Solutions\ CRiSTAL Warehouse Management System\Miscellaneous Settings]

If you want to use a different section name for the registry keys, you must change the value for the **ProductName** key in the "Web.config" file, as well as the section names in the "WMSnet500\_Registration.reg" file.

#### <u>Company</u>

The text string specified in this key is displayed on the home page to identify the company name.

### **10. Running the WMSNET Application**

#### **Important Note**

If you are running the WMSNET application on a Windows 2003 R2 server, please refer to section 11 below on new security settings that must be configured on the server to allow ASP.NET applications to run.

If you are running the application on the web server machine itself, enter the following URL in Internet Explorer:

#### http://127.0.0.1/WMSnet500

If you are running the application on a client machine, you must specify the IP address of the web server in the URL:

http://192.168.2.88/WMSnet500

# 11. Windows 2003 Server Security Configuration

When Microsoft introduced Windows 2003 Server R2 into the market, they made a change in the server such that all internet features are disabled by default. This was in direct opposite to Windows 2000 and Windows XP where all internet features are enabled by default.

On a Windows 2003 Server machine, the Internet Services Manager program includes a new "Web Service Extensions" node as shown.

🐌 Internet Information Services (IIS) Manager					
🚺 <u>F</u> ile <u>A</u> ction <u>V</u> iew <u>W</u> indow <u>H</u> elp					
Internet Information Services	📁 Web Service Extensions				
Application Pools		△ Web Service Extension	Status		
🖻 🭎 Web Sites		🍸 All Unknown CGI Extensions	Prohibited		
	Allow	🍸 All Unknown ISAPI Extensions	Prohibited		
	Drobibit	😼 Active Server Pages	Allowed		
E crystalreportviewers	Prombit	NET v1.1.4322	Allowed		
Web Service Extensions	Properties	NET v2.0.50727	Allowed		
		NET v4.0.30319	Allowed		
		🔊 Internet Data Connector	Prohibited		
	Tasks	🔊 Server Side Includes	Prohibited		
		NebDAV	Prohibited		
	Add a new Web service extension				
	Allow all Web service extensions for a specific application	<u>a</u>			
	Prohibit all Web service extensions				
	@ Open Help				
	1				

By default, all Web Service Extensions are set to "Prohibited". To run the WMSNET application, you must set the following extensions to "Allowed":

- Active Server Pages
- ASP.NET v1.1.4322
- ASP.NET v2.0.50727
- ASP.NET v4.0.30319

If these Web Service Extensions are not changed to "Allowed", the application will not work, and no error message will be returned from the web server either.

### 12. Installing Reports

Report templates used by WMSNET are developed in Crystal Reports 9.x, which are not compatible with the Crystal Reports 7.x templates used by the Desktop WMS.

The Crystal Reports 9.x templates are installed into the directory "C:\WMSnet500\REPORTS".

Access to the WMSNET web reports is controlled from the Desktop WMS **Administration > System > Reports Menu Maintenance** program option. All WMSNET report templates are given report names with the prefix "WEB – ":

Repo	orts Menu Mainte	enance					
U	DF Reports	Standard Reports	System Reports	Report			
S/No	Report Name			WEB - Free Stock	Report		
				Selected Report T	emplate		
191	Warehouse Utilisal	tion by Client		Stock Status - Fre	e.rpt		
192	Warehouse Utilisal	tion by Client (Whole)					
193	Warehouse Zone	Type List		Describ Group			
194	WEB - Free Stoc	Free Stock Report Group					
195	WEB - Incoming Sh	hipment Report		WEB REPORTS			<b>_</b>
196	WEB - Incoming St	hipment Report - Bros		Bauamahaua	Directory	Templates	Description
197	WEB - Incoming St	hipment Summary		Parameters	Directory		Description
198	WEB - Inventory N	Movement Detail		List of User Gro	up	Parame	ters
199	WEB - Inventory N	Movement Summary		CETKEA-BNE		<ul> <li>Client</li> </ul>	-
200	WEB - Inventory N	Movement Summary - EXPOR	T FORMAT	CETKEA-FRE		Ulass TD.	
201	01 WEB - Inventory Movement Summary Bros			CETKEA-HQ		User ID	Hidden 🗾
202	WEB - Inventory R	Replenishment Recommenda	tion				-
203	WEB - Inventory S	Status - Actual - Item Range					-
204	WEB - Inventory S	Status - Planned - Item Rang	le la	CETRW-AFT			
205	WEB - Inventory S	Status - Selected Plan Date		CETRW-SIN			<b>_</b>
206	WEB - Inventory S	Status - Selected Plan Date -	Item	CEULTRA-FIL			•
207	WEB - Outgoing St	hipment Report		CEWAK-TRA			
208	WEB - Outgoing Sl	hipment Report - Bros					<u> </u>
209	WEB - Outgoing St	hipment Report - Non-serial		Default Admin			•
210	WEB - Outgoing St	hipment Report - Serial		MANAGEMENT			-
211	WEB - Outgoing Sl	hipment Summary					
212	WEB - Shipment -	Outaoina - EXPORT FORMAT		Output Printer Nam	ne	Fixed Val	ue
213	WEB - Shipment Si	ummary - Outgoing - FYPOP	TEORMAT	SYSTEM		<u> </u>	

Although you must use the Desktop WMS to control which WMS user groups are allowed to access each web report, you actually cannot use the Desktop WMS to preview the Crystal Reports 9.x report templates (because the Desktop WMS report engine only works with Crystal Reports 7.x templates and is not upward compatible with the Crystal Reports 9.x templates).

### 13. Installing PDF Reader

All reports generated by WMSNET must be viewed using a PDF reader program. Note that the PDF reader program must be installed on the client machine.

You can use either the free PDF readers from Adobe or Foxit:

- Adobe Reader 8.x (<u>http://www.adobe.com/products/reader/</u>)
- Foxit Reader 2.x (<u>http://www.foxitsoftware.com/pdf/rd\_intro.php</u>)

The Foxit Reader provides almost all the features of Adobe Reader, but consumes a fraction of the RAM resources required as that of Adobe Reader. For instance, the Foxit Reader installer is only 2.5 MB, whereas the Adobe Reader installer is a whopping 22 MB.

### 14. Changing JPG Images

The JPG images displayed in the WMSNET application are referenced from the "C:\WMSnet500\Graphics" subdirectory. By default, the 2 files:

- Logo.jpg
- Logo\_SMALL.jpg

contain the CRISTAL logo. To display your own images, simply replace these files with those containing your own logo.

## 15. Directory Contents of "WMSnet500" Package

The installation instructions described in this document references an installation package containing the various setup files. This package comprises the following directories and subdirectories:

#### WMSnet500\_Deployment Package

- ► MDAC
  - Component Checker
  - MDAC\_28
- ► Net Framework 4.0
- ► Crystal Reports Runtime 2010
- ► WMSnet500\_Setup

The contents of each subdirectory are described in the following sections:

Subdirectory	Described in Section
MDAC	3 – Install MDAC 2.6 or higher
Net Framework 4.0	4 - Microsoft .NET Framework 4.0
Crystal Reports Runtime 2010	5 – Crystal Reports 2010 Runtime Package
WMSnet500_Setup	7 – Install "WMSnet500" Setup Package

### 16. Install "WMSPDA" Setup Package

The installation files for the WMSPDA application are located in the "WMSnet500\_Deployment Package\WMSPDA" directory. Click the "Setup.exe" file to start the installation.

*WMSNET must be installed first before the installation of WMSPDA.* This is because MDAC, .NET Framework etc is pre-requisite for the WMSPDA to run correctly. Follow the Setup steps by clicking "Next" button as shown in all the figures below.



🖶 WMSPDA	
Select Installation Address	
The installer will install WMSPDA to the following web location. To install to this web location, click "Next". To install to a different web	location, enter it below.
<u>S</u> ite:	
Default Web Site	V Disk Cost
Virtual directory:	
WMSPDA	
Cancel < E	Back Next >



🖗 WMSPDA		
Installing WMSPDA		
WMSPDA is being installed.		
Please wait		
	Cancel	< Back Next >
	Cancel	K Back Next >



After the installation is done successfully, you need to open the Microsoft Internet Information Server (IIS). The WMSPDA virtual directory will be automatically created as shown in the figure below.

Repeat the steps in Section 10 of the "Web Config" above to edit the Login DSN, Login UID etc. Once done, WMSPDA is ready to run.



# 17. Running the WMSPDA Application

If you are running the application on the web server machine itself, enter the following URL in Internet Explorer:

#### http://127.0.0.1/WMSPDA

If you are running the application on a client machine, you must specify the IP address of the web server in the URL:

http://192.168.2.88/WMSPDA