Welcome to the NYExUG October Meeting

- ***October Meeting*** *– Troubleshooting ActiveSync Recommendations for Windows Mobile, Palm, and iPhone*

- ***November Meeting*** *– TBD (Lotus Notes migration, Fax Integration, etc)*

- ***New Raffle Opportunities*** *(for each new member's first meeting, get an additional raffle ticket)*

- *Meeting Topics Ideas – let me know in person or via email   ben a.t reefsolutions . com*

Troubleshooting ActiveSync Recommendations for Windows Mobile, Palm, and iPhone

When ActiveSync works, it works! But, when it does not, it's a bit of a challenge to figure out the cause.

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**If you can't get enough Exchange & technology read my blog http://ehlotech.blogspot.com**

About Ben Serebin

- *Working in the IT sector since 1996*
- *Specialty is Exchange Server, Spam Filtering, and Wireless (802.11x)*
- *Current Project Q4 08: setting up ESx for production performance testing of Exchange 2007 and recovery testing environment.*
- *Runs Exchange 2003 Server, Blackberry Exchange Server, and had run Good Mobile Messaging Server. Carries 2 PDAs, a BlackBerry 7250 and a Palm Centro (ActiveSync).*

On Memory Lane for ActiveSync

- *What was the first version of ActiveSync released?*
- *Answer: Show the PocketPCFAQ table and share the answer. (it's 3.0).*
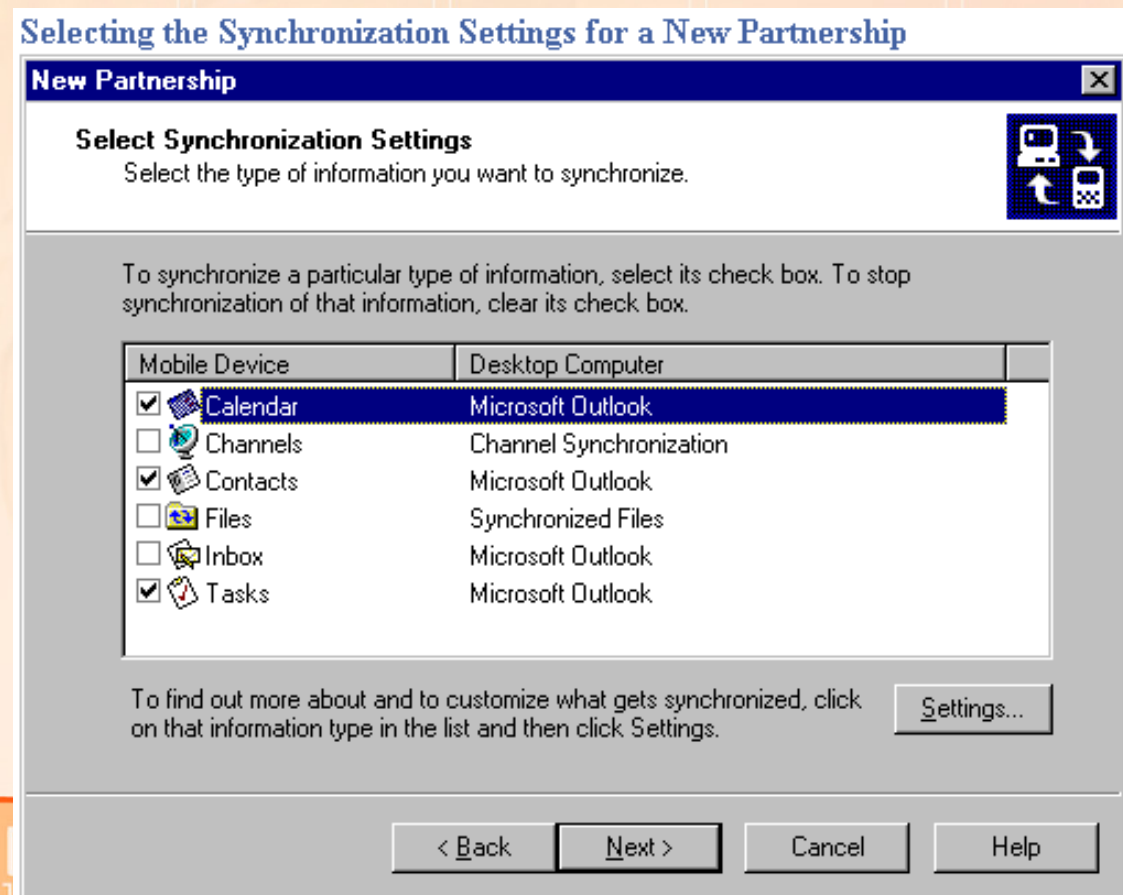
Versions of Windows CE / Windows Mobile

From http://www.pocketpcfaq.com/wce/versions.htm

Windows CE and Windows Mobile is composed of a variety of components. Each component provides specific functionality and capabilities. Here is a list of the different versions of the various components:

Product Name	Code Name	Windows CE Operating System	Applications and Shell	Desktop Synchronization Software
Handheld PC 1.0 (Released Fall, 1996)	Pegasus	1.0 Build 126-457 to 737-737	1.0	H/PC Explorer 1.0, 1.1
Embedded Toolkit 1.0 (Developers Only)	Alder	1.0	n/a	n/a
Embedded Toolkit (Developers Only) Released Fall, 1997	Birch	2.0	n/a	n/a
Handheld PC 2.0 (Released Fall, 1997)	Mercury	2.0 Build 7258-7260	2.0	Windows CE Services 2.0, 2.1
Palm-size PC 2.0 (Released Spring, 1998)	Gryphon	2.01 Build 8037-8040	1.0	Windows CE Services 2.1
Embedded Toolkit (Developers Only) Released Fall, 1998	Birch SP1	2.1	n/a	n/a
Palm-size PC 2.11 Chinese Version (Released Fall, 1998)	Orion	2.11	1.1	Windows CE Services 2.2
Handheld PC, Professional Edition (Released Fall, 1998)	Jupiter	2.11 Build 8262	3.0	Windows CE Services 2.2
Palm-size PC 2.11 US, Japanese Version (Released Winter 1999)	Wyvern	2.11 Build 9015	1.2	Windows CE Services 2.2
Video-Internet-Computers (VIC) TV Set Top Box - China (Previewed Spring 1999)	Venus		n/a	n/a
Web-Enabled Telephone (Previewed CeBIT 1999)	Hermes	2.11	n/a	n/a
Embedded Toolkit (Developers Only) Released Spring 1999	Birch SP2	2.12	n/a	n/a
Microsoft TV Announced 6/99		2.12 w/Direct X	n/a	n/a
Embedded Toolkit (Developers Only) (Preview Release from Windows CE Developer's Conference, Released June 2000)	Cedar	3.0	n/a	n/a

Pocket PC, (Previewed at CES 2000, Announced 4/19/2000)	**Rapier**	**Original 3.0.9348 Build 9351 Latest iPAQ Rom 3.0.9348 build 9616**	**3.0**	**ActiveSync 3.1**
Handheld PC 2000, (Announced 9/8/2000)	**Galileo**	**3.0 Build 9546-126**	**3.0**	**ActiveSync 3.1**
Embedded Toolkit - (Announced 2/6/2001) **Windows CE.NET** (10/24/01)	**Talisker**	**4.0**	**skinnable UI**	**n/a**
Pocket PC 2002 (Announced 9/6/2001, Shipped 10/4/01)	**Merlin**	**3.0.11171 Build 11178**	**3.0**	**ActiveSync 3.5**
Pocket PC 2002 Phone Edition, (Announced 2/19/02, Shipped 3/13/02)	**n/a**	**3.0**	**3.0**	**ActiveSync 3.5**
Windows CE .NET 4.1 (Announced 8/8/02)	**Jameson**	**4.1**	**4.1**	**n/a**
Smartphone 2002 (Announced 10/22/02)	**Stinger**	**3.0**	**3.0**	**ActiveSync 3.6**
Windows CE.NET 4.2 (RTM 4/23/03)	**McKendric**	**4.2**	**4.2**	**n/a**
Windows Mobile 2003 (Announced 6/23/03)	**Ozone**	**4.20.1081 Build 13100**	**4.2**	**ActiveSync 3.7**
Smartphone 2003 (Announced 10/21/03)	**Ozone**	**4.20.1088 Build 13099, 14053**	**4.2**	**ActiveSync 3.7**
Windows Mobile 2003 Second Edition (Announced 3/24/04)	**Ozone Update**	**4.21.1088 Build 14049**	**4.2.1**	**ActiveSync 3.7.1**
Windows CE 5.0 (Preview 3/29/04)	**Macallan**	**5.0**	**5.0**	**n/a**
Windows Mobile 5.0 Announced 5/10/05	**Magneto**	**5.1.1700, Build 14334 to 14397**	**5.0**	**ActiveSync 4.0**
Windows Mobile 5.0 AKU2		**5.1.1700, Build 14334.2 (per Emulator) The .2 indicates AKU2**	**5.0**	**ActiveSync 4.1**
Windows Mobile 6	**Crossbow**	**5.2.318 Build 15341.0.0.0**	**6**	**ActiveSync 4.5**
Windows Mobile 6.1		**5.2.19202 Build 19202.1.0.0**	**6**	**ActiveSync 4.5**
Future Operating System - Merging the Pocket PC and Smartphone versions of the platform	**Photon**			
Notes	**Internal Microsoft Code Name**	**Core Operating System.**	**The included applications and the GUI Shell**	**Synchronization software that runs on the desktop.**

ActiveSync Troubleshooting Is Difficult

- *Error reporting on devices is up to the manufacturer. So each device generates it's own errors and there is no standard on it.*
- *Device errors range from non-existent (thank you Mr Jobs) to not human friendly of AirSAMStateMachine c.2398 1439 (thank you Palm).*
- *Limited errors reported on the Exchange Server's Application Event Log.*
- *Client can contain more helpful error, but it depends on the vendor.*

Is ActiveSync Setup Correctly?

- ***Check if Exchange ActiveSync is working***
- *Open the browser on any machine connected to your LAN.*
- *Type in the URL: http://**mailserver**/Microsoft-Server-Activesync where **mailserver** is the hostname of your exchange server.*
- *You should receive an **Error 501/505 – Not implemented or supported**. This condition states that everything is normal! If you don't get this error, or if you get a 404, then you have a problem. Make sure IIS & Exchange services are running. If problem still persists, you may need to regenerate the Exchange virtual directories on IIS. For more information see KB811262. http://support.microsoft.com/kb/811262*
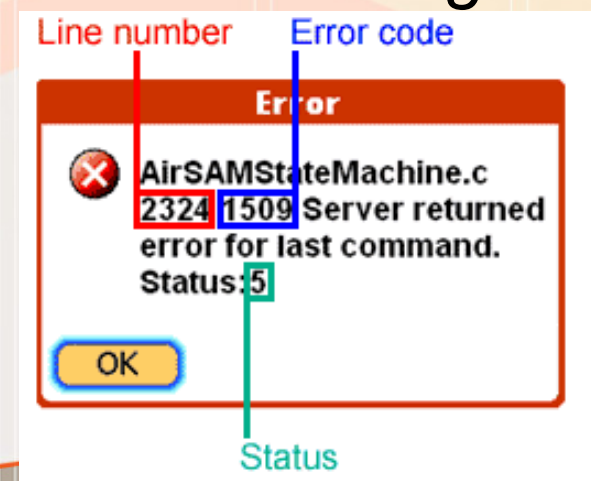
Single Server Configurations

- *Forms Based Authentication and SSL on a single Exchange Server configuration frequently requires http://support.microsoft.com/kb/817379 Use Internet IIS Manager to create this virtual directory for Exchange ActiveSync and Outlook Mobile Access to work (exchange-oma).*

- *Test without SSL if necessary on your ActiveSync device to see if SSL is the cause.*

- *Make sure the root Certificate Authority is pre-loaded on the ActiveSync device you plan to deploy. NOT all devices have the latest root CA certs (e.g. my favorite, rapidsslonline.com [$15/year] isn't supported with Mobile 5 or 6 as per tested by a ug member). But you can always manually add them, but it's more work for each device. A ug member recommended digicerts.com ($144/year) support for Mobile 5 and above & they support Unified Communications certs.*

Windows Mobile ActiveSync Troubleshooting

- Examples of Windows Mobile ActiveSync errors as per PocketPCFAQ.com
- Full error codes available at http://www.pocketpcfaq.com/faqs/activesync/exchange_errors.php

- **Error code   Description**
- DEV_errorcode   This error code indicates that the error was from the Server ActiveSync client on the device.
- MIS_errorcode   This error code indicates that the error was from the Mobile Information Server with the Server ActiveSync component installed
- SYNC_errorcode   This error code indicates that the error was from the Exchange 2003 server. MIS_errorcode errors were replaced with SYNC_errorcode errors on Windows Mobile 2003-based devices.
- HTTP_errorcode   Standard HTTP error (Internet related)
- CONNMGR_errorcode   Connection Manager error
- INTERNET_errorcode   Standard WinInet error (Internet related)
- These errors can appear either on the device, the Application Event Log, IIS Logs or the NexTags (developers) logs.
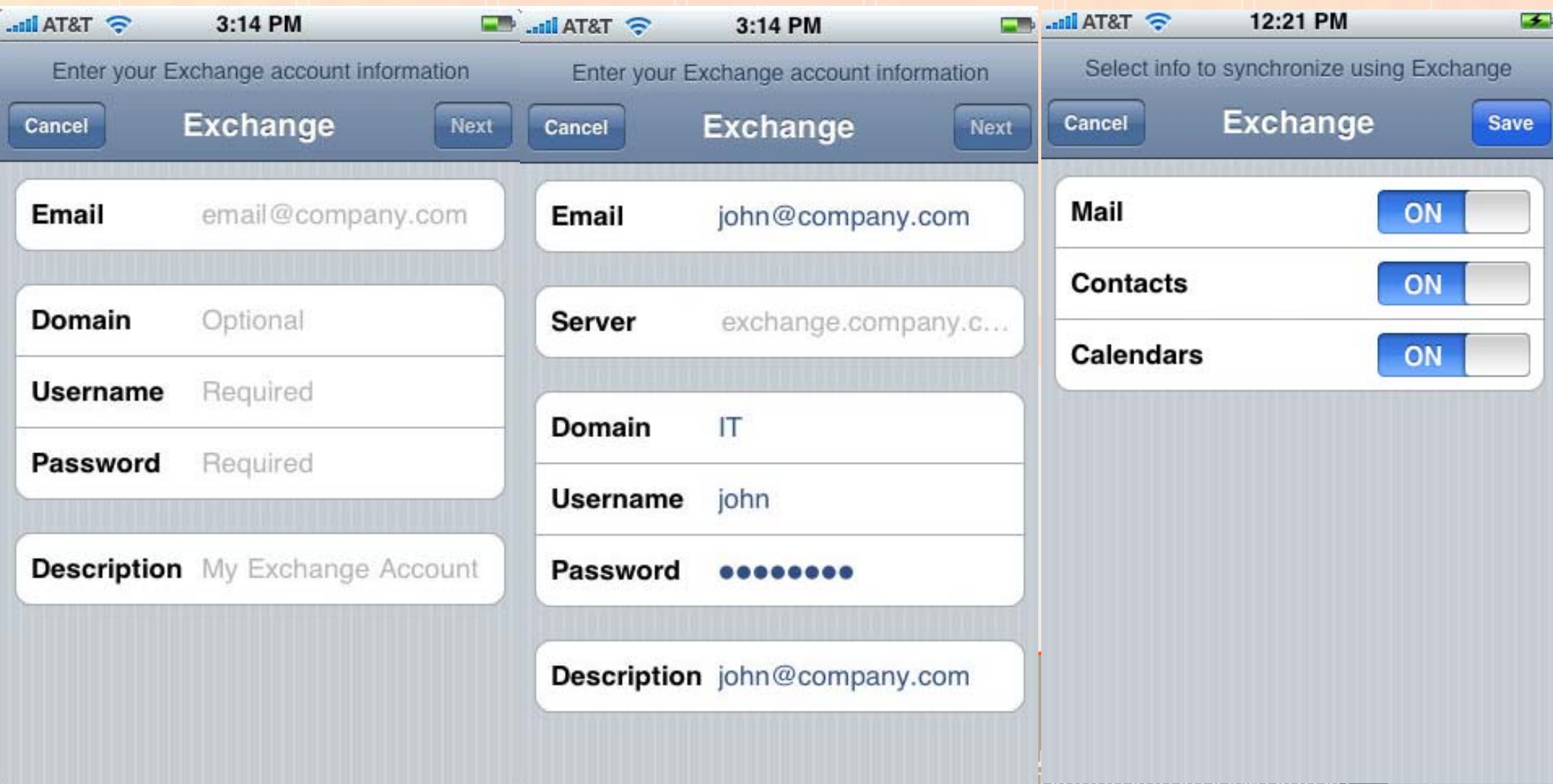
Palm OS Based ActiveSync Troubleshooting

- *ActiveSync errors use two layers: the quick error screen (worthless), and a "Details" screen that has more information. These detailed error messages can indicate a wide range of issues, including scheduled sync problems and difficulties connecting to the data network because of a weak radio signal.*

- *Mid-range ActiveSync Support, step below Windows Mobile ActiveSync.*

- *Get the full list of explained error codes via Exchange ActiveSync error codes and meanings in VersaMail Solution ID: 41831. Search with "Palm KB 41831".*

- *Show example of Palm OS based troubleshooting.*

Error
There was a problem syncing events.
OK   Details

Line number   Error code
Error
AirSAMStateMachine.c
2324 1509 Server returned error for last command.
Status:5
OK

Status

iPhone ActiveSync Configuration

- *The entire ActiveSync configuration available with the iPhone OS v2.1.*

iPhone ActiveSync Troubleshooting

- *While the iPhone knows music, it does not know error reporting. None exists.*

- *Supported via Exchange 2003 SP2 & 2007 SP1*

- *SSL is NOT required. Port 80 or 443.*

- *Make sure your SSL certs are part of the pre-loaded devices Certificate Authority. ActiveSync also has problems with chained certs.*

- *Remote Wipe and additional features - Exchange System Manager (ESM) and Microsoft Exchange ActiveSync Mobile Administration Web Tool for remote wipe. Exch 07 support it via OWA and Exchange Management Console.*

- *Search with "Apple iphone TS1868"*

iPhone & Palm ActiveSync MIA Functionality

- *Features Not Supported with iPhone 2.1 & Palm ActiveSync via VersaMail 4.01*
- *Task Sync*
- *Creating Meeting Invites*
- *Setting Out of Office (aka OoO)*
- *Follow-up Flags*
- *Folder Management (only Palm AS lacks)*
- *Useful document for working with iPhones is the Enterprise Deployment Guide (Third Edition) http://manuals.info.apple.com/en_US/Enterprise_Deployment_Guide.pdf, 60 pages. But includes chapters on Deploying iTunes, Cisco VPN Server Configuration, etc.*

Excellent Resource for ActiveSync Testing

- *Microsoft Website to test ActiveSync and RPC/HTTP. Test your SSL certs as well. https://www.testexchangeconnectivity.com*

Microsoft®
Exchange Server
Remote Connectivity Analyzer

* Prototype - For Testing Purposes Only *

Original concept by Shawn McGrath / Coding and technical implementation by Brad Hughes

Collecting Information

Please enter the following information for an account in your domain. We recommend using a test account for the Exchange ActiveSync connectivity test. To skip SSL certificate validation, check the Ignore Trust for SSL checkbox. Please do not select Synchronize All Items in Inbox folder if your inbox has a large number of items as the test will time out.

Account & Test Details

ActiveSync Server	
Domain\Username (or UPN)	
Password (Is this secure?)	
Synchronize All Items in Inbox folder	☐
Ignore Trust for SSL	☐

Thank you for attending the October 2008 NY Exchange User Group Meeting.

Raffles – do not forget, if you bring in new members, you 2x, 3x, or more your chances to win raffle prizes.

See you next month…