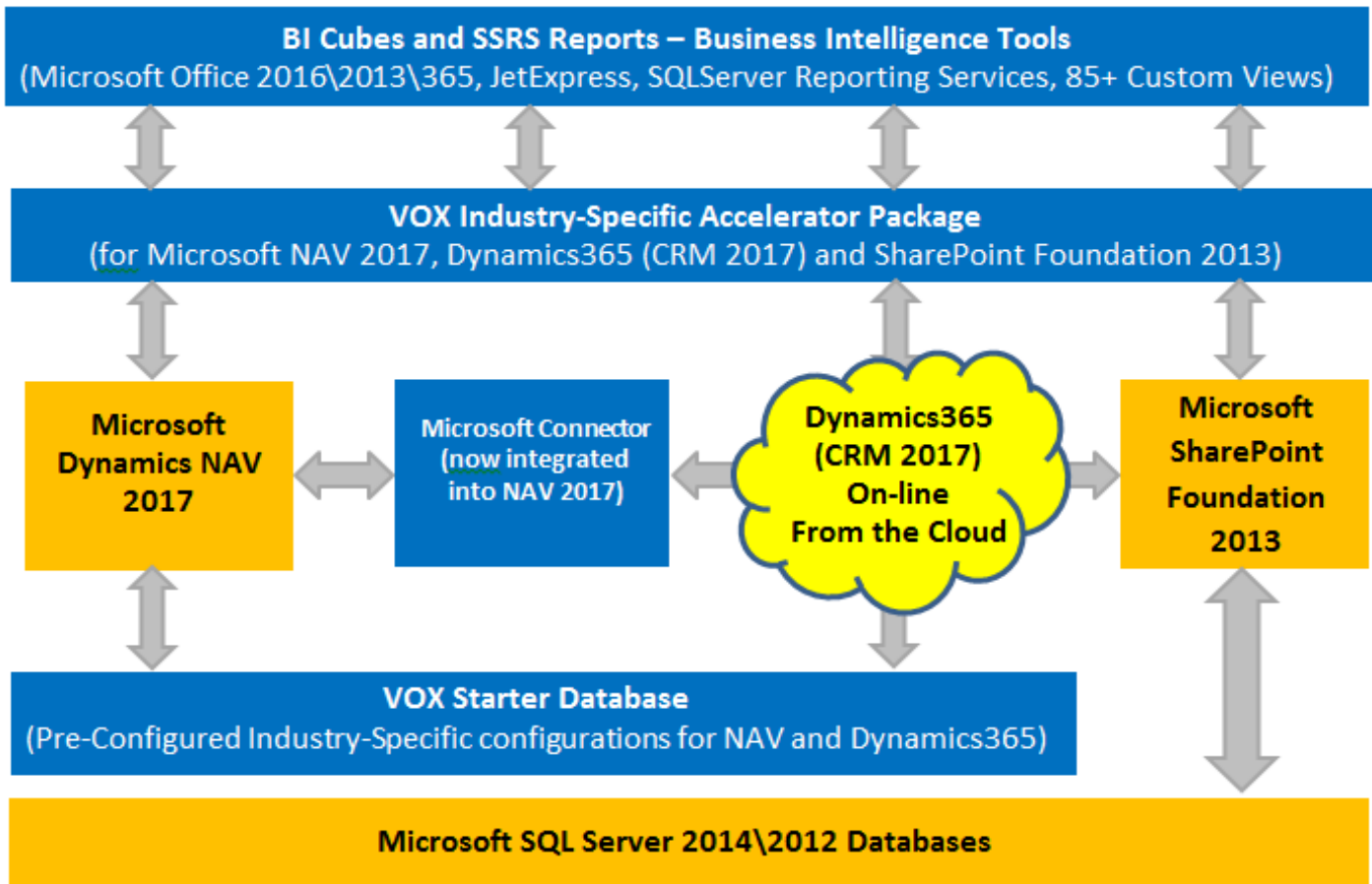


# VoxISM 2017 Technical White Paper – with Dynamics365 On-line

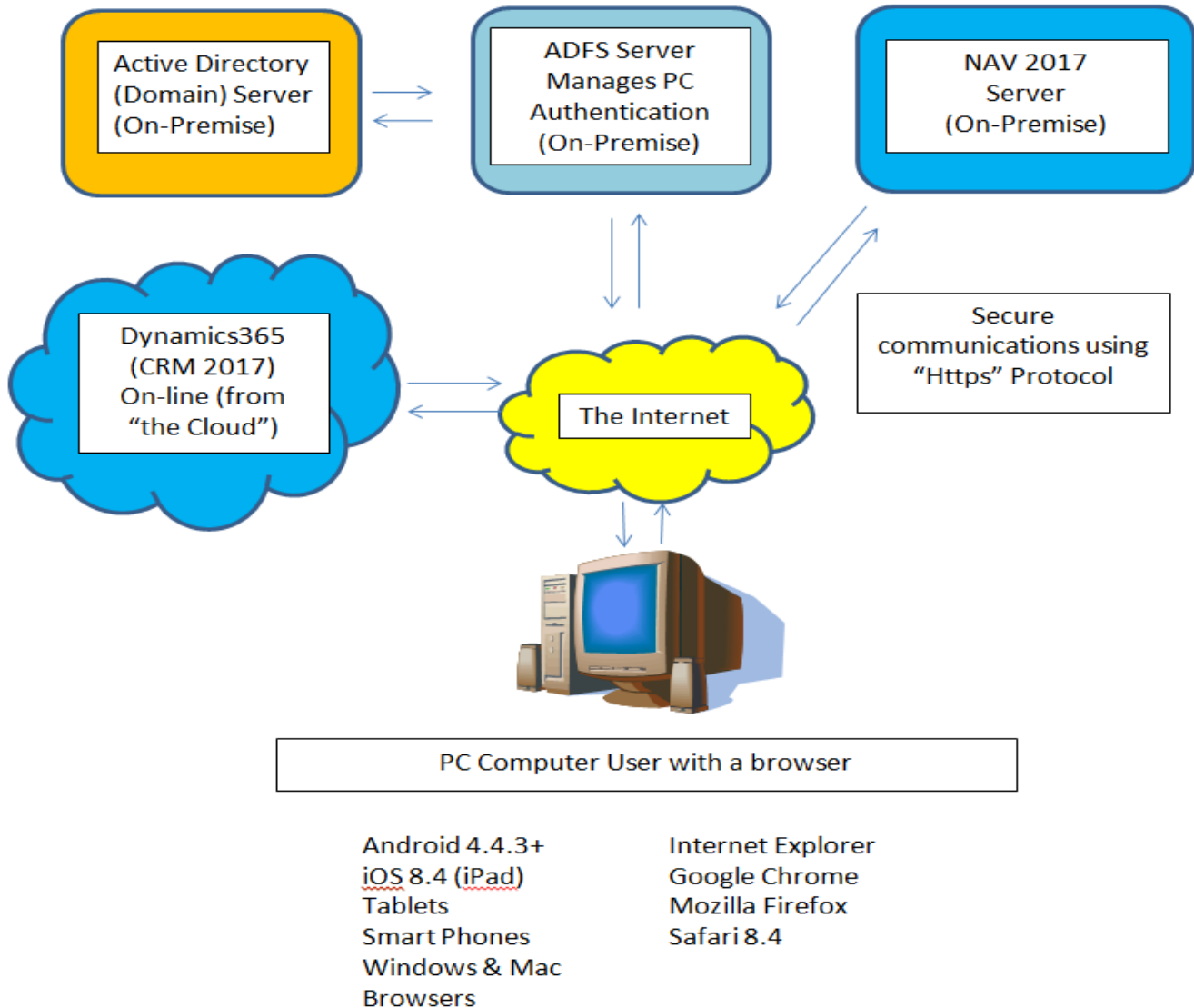
## 7 Integrated Software Technologies



1. **Microsoft SQLServer Databases** (2014\2012)
2. **Vox Starter Database** with pre-configured industry-specific configurations and features.
3. Integration between **Microsoft Dynamics NAV 2017** and **Microsoft Dynamics365 (CRM 2017)** using the **Microsoft Connector** service, now built-into NAV 2017 (**web-services**)
4. **Microsoft SharePoint Foundation 2013** integrated with NAV and Dynamics365 for document management and collaboration (using **Zetadocs**).
5. **Vox ISM Industry-Specific Accelerator Packages** - NAV enhancements and tools for Canadian Manufacturers, PSO's, Health Care, etc.
6. **BI Cubes\SSRS Reports** – Business Intelligence and Analysis Tools delivering real-time data in flexible Excel Slicer\Pivot tables and SSRS Reports for ad hoc analysis using SQL Server Reporting Services and Excel 2016\2013 SP1\365
7. **Microsoft Office 2016\2013 SP1\365 Integration** – Dynamics365-Outlook, Word and Excel integration with NAV using Jet Express, and ODBC\Odata connections to **over 85 pre-configured customized Views**.

## Mobility-Enabled Access for Tablet, Phone and Mobile Devices

Any Time, Any Where, from Any Device...



The VoxISM Solution utilizes **ADFS** (Active Directory Federation Services) and **IFD** (Internet-Facing Deployment) to provide **secure https-enabled** access to **NAV 2017** and **SharePoint2013** for **Tablets, Phones** and **Mobile devices** that have an Internet connection. Dynamics365 (CRM 2017) On-line has this pre-enabled.

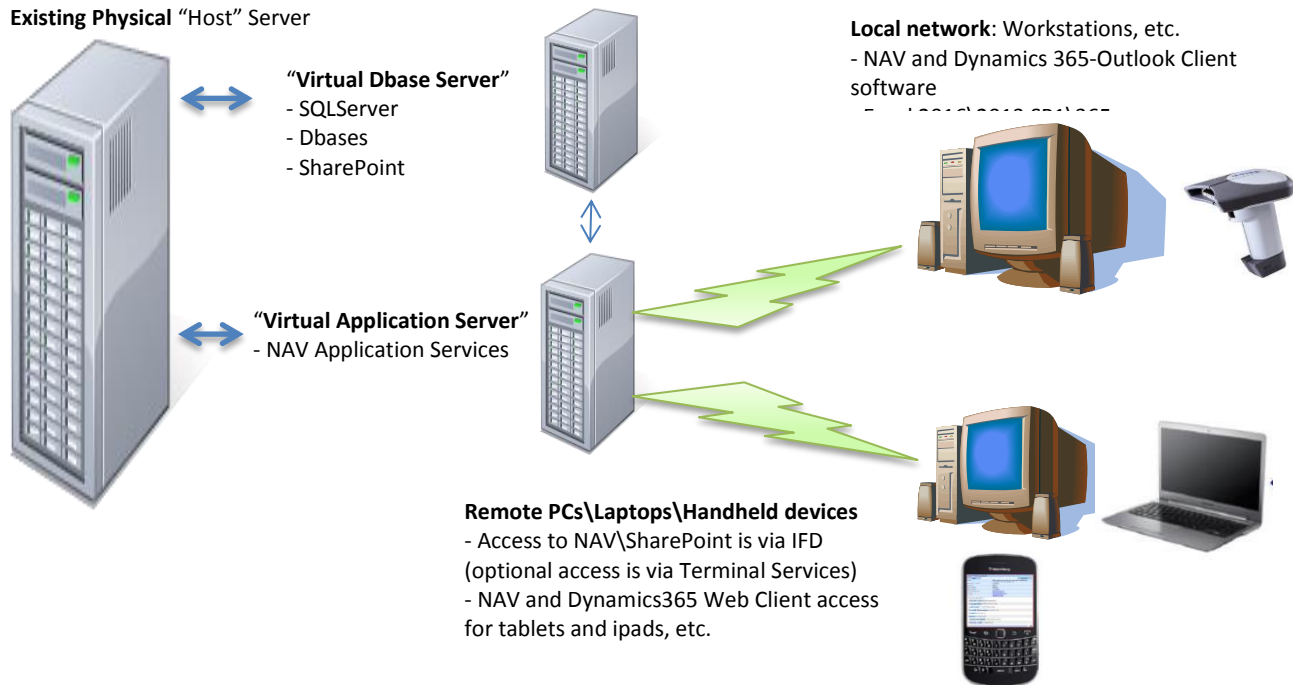
Remote access to these can be obtained in the following ways:

- Via Web Browser (over the Internet) – Requires Internet Facing Deployment (**IFD**) to be configured.
- Via hand-held mobile devices (Windows Tablets, iPads, Android devices) – Requires **IFD**
- Via Terminal Services (requires a Terminal Services server).

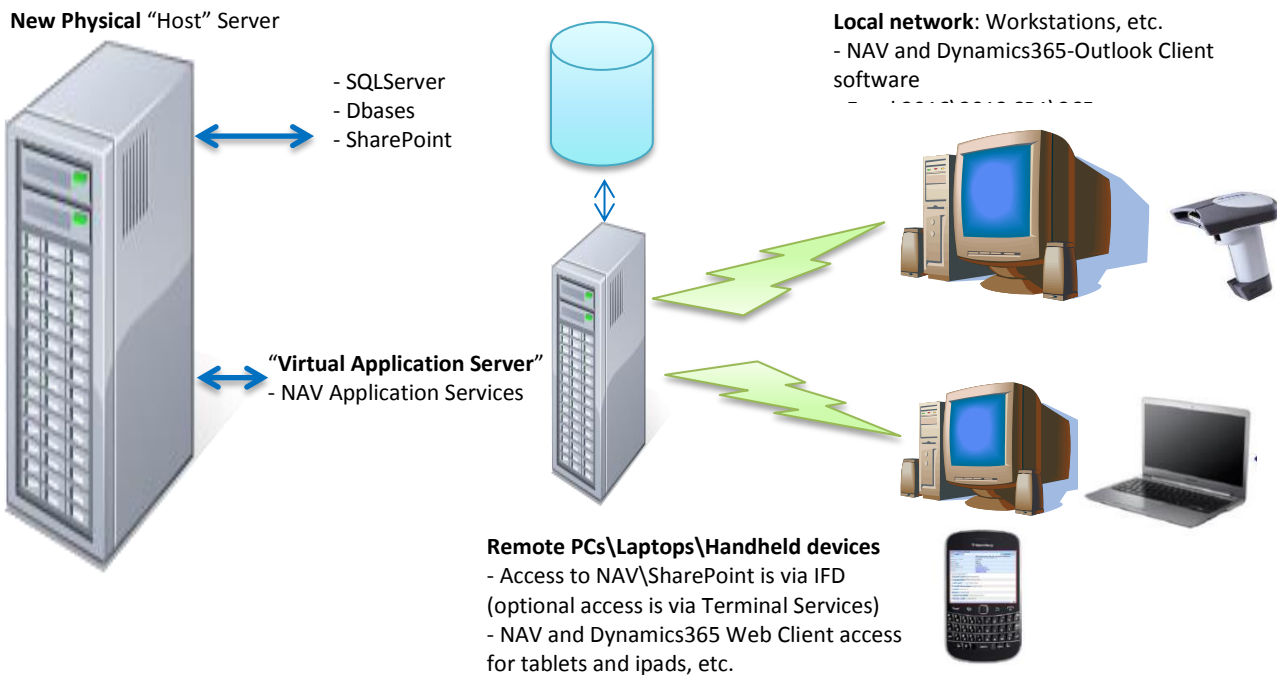
**VoxISM will work with your IT group to get IFD and Mobility enabled for NAV 2017 and SharePoint.**

## Infra-structure Options for VoxISM 2017 System

### Option A – 2 New Virtual Servers set up on *your existing* Physical Server



### Option B – New Physical Server purchased with 1 Virtual Server set up



## Microsoft NAV 2017 Server Hardware\Software Requirements

\* The Servers running the VOX ISM software must be in the same **Active Directory domain** as the other PCs.

Item	Requirement
Computer/processor	<ul style="list-style-type: none"> <li>- <b>Single or Dual Quad-core x64</b> architecture 2 GHz CPU or higher such as AMD Opteron or Intel Xeon systems</li> </ul>
Memory (RAM)	<ul style="list-style-type: none"> <li>- <b>32-64 gigabytes (GB) – ~10 GB of this will be allocated to the “Virtual Application Server”</b>. The remaining will be used to run SQL, SSRS, BI and the Virtualization processes</li> </ul>
Hard disks	<ul style="list-style-type: none"> <li>- We recommend that a physical separate Data-Array for data storage be used: SAS with hardware RAID 5, RAID6 or RAID 10 or standard SCSI with hardware RAID 5 with <b>1 TB of free hard-disk space</b>.</li> <li>- This Server will also house the “Virtual Application Server” which will be running on this Data-Array as well. See “Additional Notes on Virtual Servers”</li> </ul>
Network card\Switches	<ul style="list-style-type: none"> <li>- <b>Dual 1000 Mbps (Gigabit) Network Cards</b></li> <li>- <b>1 Gigabit Network Switch (connecting Server(s) to the rest of the Network)</b></li> </ul>
Operating system	<ul style="list-style-type: none"> <li>- <b>Microsoft Windows Server 2012 \ 2012 R2 Standard or Datacenter (x64)</b></li> <li>* Windows Server 2008 R2 and Small Business Server are <i>not supported</i></li> </ul>
SQL Server	<ul style="list-style-type: none"> <li>- <b>Microsoft SQL Server 2014 or 2012 SP1, Standard or Enterprise (x64)</b></li> <li>* SQL Server 2016 is not yet supported by all the ISM Integrated tools.</li> <li>* SQL Server 2008 R2 is no longer supported</li> <li>* VoxISM staff will install SQLServer but you must supply the Media.</li> <li>* This must include user CALs for the expected number of concurrent users</li> </ul>
Additional Software Required on Servers	<ul style="list-style-type: none"> <li>- <b>Microsoft Office 2016, 2013 SP1 or 365 (Excel, Word, Outlook)</b> is required on <b>both the Database and Application Servers</b> to allow for the Jet Reports, export to Excel and BI Cube NAV-Integration</li> </ul>
Additional Notes on Virtual Servers	<ul style="list-style-type: none"> <li>- <b>A Virtual Server (VM)</b> will need to be configured on this Physical Server to function as the NAV “Application Server”:</li> <li>- It must have at least <b>10 GB of RAM Allocated</b> to it</li> <li>- It must have <b>at least 150 GB of drive space allocated to</b>.</li> <li><b>If you already have an existing Physical and wish to set up 2 VMs then a second VM will need to be configured for the Database\SharePoint Server:</b></li> <li>- It must have at least <b>18-20 GB of RAM Allocated</b> to it</li> <li>- It must have <b>at least 600 GB of drive space allocated to</b>. This can all be allocated to a single C: drive “vhd” since it is a Virtual Server.</li> <li>-</li> <li>* <i>Specific configurations may vary based on number of NAV users.</i></li> </ul>

## Microsoft Dynamics365 (CRM2017) and NAV 2017 Client Requirements:

### Supported Client Operating Systems:

- **Windows 10** Pro or Enterprise (32-bit and 64-bit editions).
- **Windows 8.1** Professional or Enterprise (32-bit and 64-bit editions).
- **Windows 8** Professional or Enterprise (32-bit and 64-bit editions).
- **Windows 7** Service Pack 1 Professional, Ultimate, or Enterprise (32-bit and 64-bit editions).
- *Windows XP is NO longer supported*
- Android 4.4.3+ (for NAV 2017 and Dynamics365 Web\Tablet\Phone Client)
- iOS 8.4+ (iPad) (for NAV 2017 and Dynamics365 Web\Tablet\Phone Client)

### Supported Browsers for Web Clients:

- Microsoft Internet Explorer 10 or 11
- Google Chrome 44.0 for Windows.
- Mozilla Firefox 40.0 for Windows.
- Safari 8.4 on iOS (iPad).
- Safari 8.0.8 on OSX.
- *Microsoft Internet Explorer 9 or earlier versions are not supported.*

	Processor	Memory	Hard disk	Network	Additional
<b>NAV 2017</b>	Dual-core 2-GHz CPU *64bit is recommended	1-2 GB RAM	1 GB of available space	Recommend <b>1Gigabit</b> Network.	Microsoft Office <b>2016\2013 SP1\Office365</b> is required for Excel, Word and Outlook integration
<b>Dynamics365 (CRM 2017)</b>		2-4 GB RAM	2 GB of available space		

**Ask us about the Government Funding Programs (COJG, etc.) - You can save up to 82% if you have < 50 employees and up to 66% if you have >50 employees.**

## Environment Overview

Your VoxISM 2017 installation will include one NAV 2017\Dynamics365 Environment which will become the “Production Environment” at Go-live. This includes:

- 1 Instance (“Default instance”) of Microsoft SQL Server 2014 or 2012 SP1
- 2 NAV 2017 CU1 Databases (PILOT and PROD) with a “production” Company and a “test” Company
- 1 Dynamics365 (CRM 2017) Database
- 1 Instance (“Default instance”) of Microsoft SQL Server Reporting Server (SSRS) with:
  - SSRS Reports and Audits
- 1 SharePoint “Corp” site with:
  - SharePoint Document Integration enabled

*\* It is assumed that the workstations and servers meet the requirements as indicated above in this document.*

### \* Customer IT requirements

1. The customer’s IT must ensure that the workstations\servers meet the requirements as indicated by the Technical Specifications documentation sent out after the technical review. Individual PC “nuances” must be managed by the customer’s IT (e.g. network Policies, 3<sup>rd</sup> party software, PC rights issues, etc.).
2. Vox will include **2hrs of technical support time** to *assist* with the installation of NAV\Dynamics365-Outlook Clients\BI Cubes and reports on PCs. The average install time for PCs should be no more than 25min so this should allow for 4 designated PCs to be setup. Any additional troubleshooting will be extra.
3. It is the customer’s responsibility to provide\obtain IT support that is knowledgeable and familiar with the existing network infrastructure including Firewall and Port settings, DNS configurations (internal and external), AD Policy settings and configurations and existing router admin configurations as well as Backup and Recovery strategies. **If you do not have IT support then VoxISM can assist you in finding appropriate resources.**
4. Vox will include **4.5hrs of technical support time** to work with the Customer’s IT staff and assist with **Enabling Mobility** (Internet Facing Deployment [IFD], ADFS, IIS externalization) for NAV and SharePoint. Any additional troubleshooting will be extra
5. The customer must provide Vox Remote Access to the new Servers in order to allow for installation of the software. Vox requires either RDP (Remote Desktop), RDP via Windows VPN or Teamviewer or Logmein or similar access methods to the Servers. Any 3<sup>rd</sup> party VPN software (Cisco, Sonicwall, Sophos, etc.) can be tried but **it will be the customer’s responsibility to provide working connectivity to the servers for the Vox consultants** should issues arise – any extended troubleshooting required for this will be considered out-of-scope. This is because many VPN software packages can vary based on PC operation systems as well as on the presence of other VPN packages.