

OPEN SPECTRUM SOLUTION

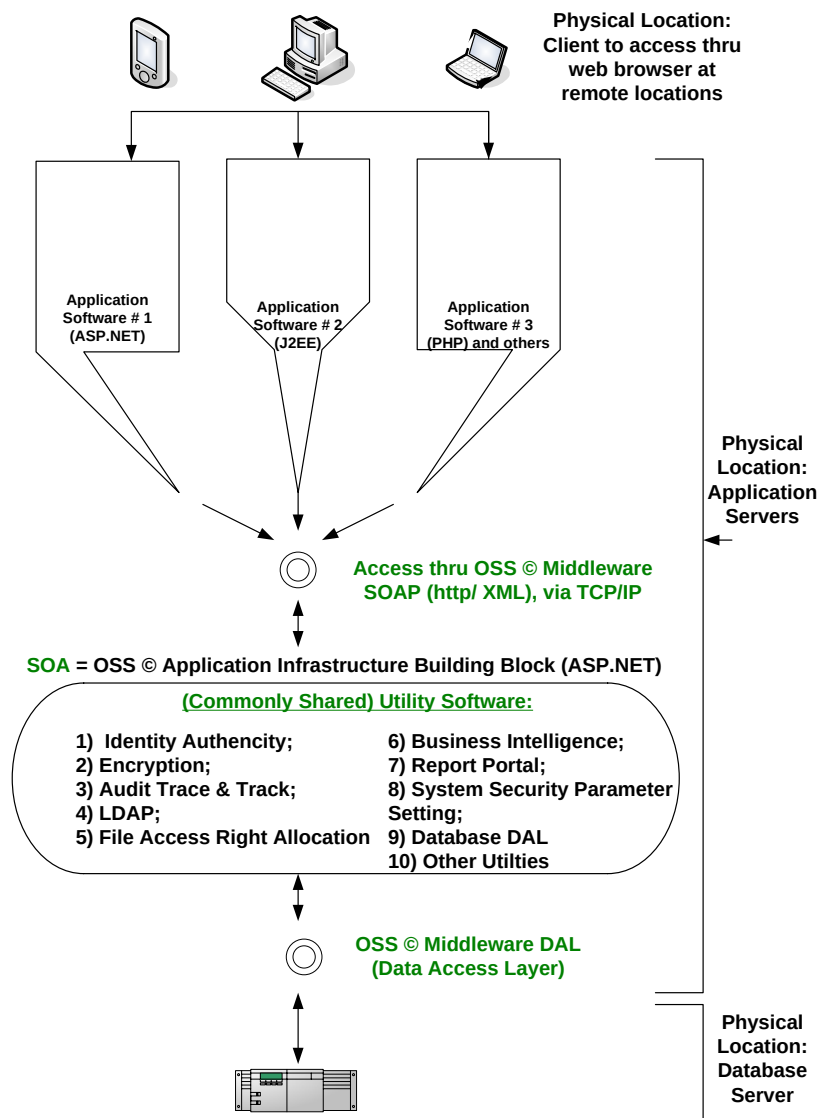
Date : Dec 01, 2006
Subject : Drawing for Paten Filing Number OSS_100_011206
Patent Name : OSS © Application Building Block (v2005.NET)
From : Open Spectrum Solution LLP
Michael Ng / mike@open-spec.com

List of Drawing: Total 12

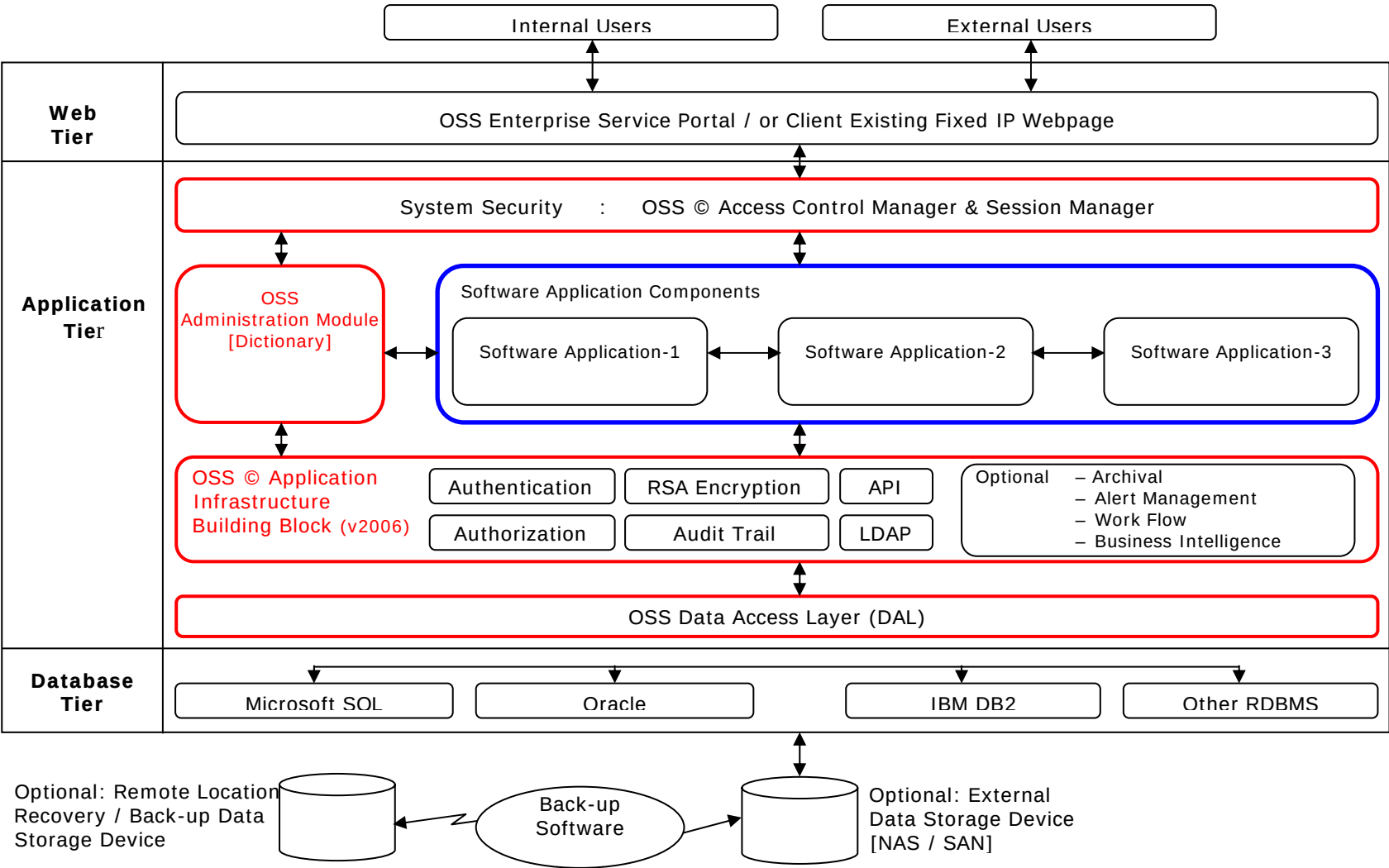
Drawing No:	Diagram	Description
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1.	II_1.1	Basic Concept & Diagram Depiction
2.	II_1.2	System Architecture & Logical Layout
3.	II_A	N-tier: 2
4.	II_B	N-tier: 3
5.	II_C	N-tier: 4
6.	II_D	N-tier: Data Access Layer with Multiple Tiers
7.	II_E	N-tier: Ultimo
8.	IV_A	System Security Administration
9.	IV_B	Audit Trace & Track
10.	IV_C	LDAP (Lightweight Directory Access Protocol)
11.	IV_D	Role Based Access Right Allocation & Administration
12.	IV_E	File Access Right Allocation & Administration

Drawing 1: **Concept & Architecture Specifications [Diagram II_1.1]**

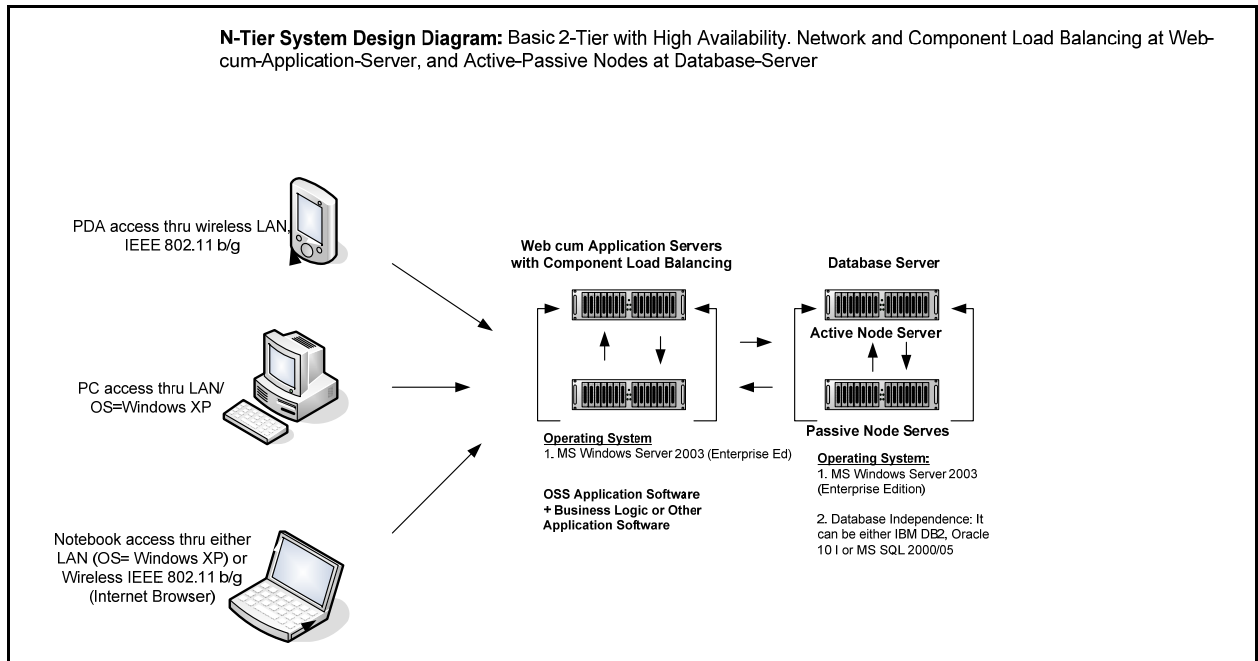
OSS © Application Infrastructure Building Block (ASP/NET) – the Concept of Enforcing all Application Software to share and access commonly used Utility Software thru OSS © Middleware DAL-SOAP



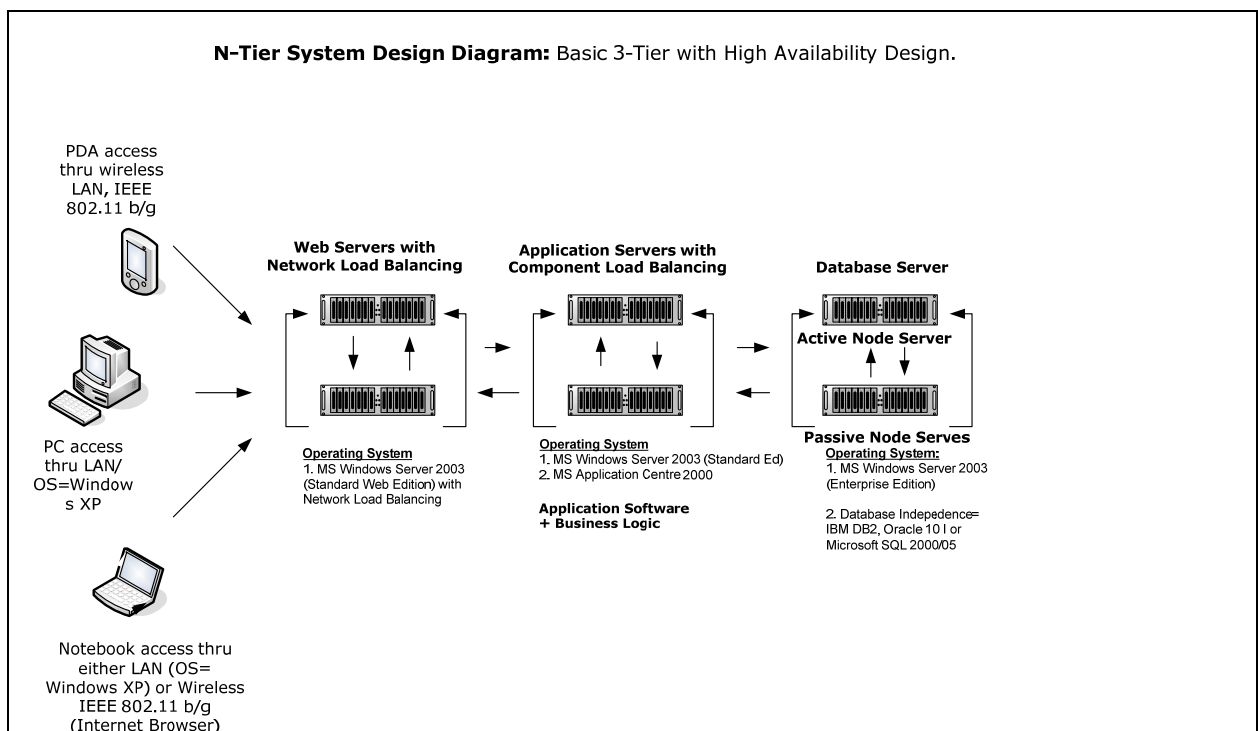
Drawing 2: **System Architecture & Logical Layout** [Diagram II_1.2]



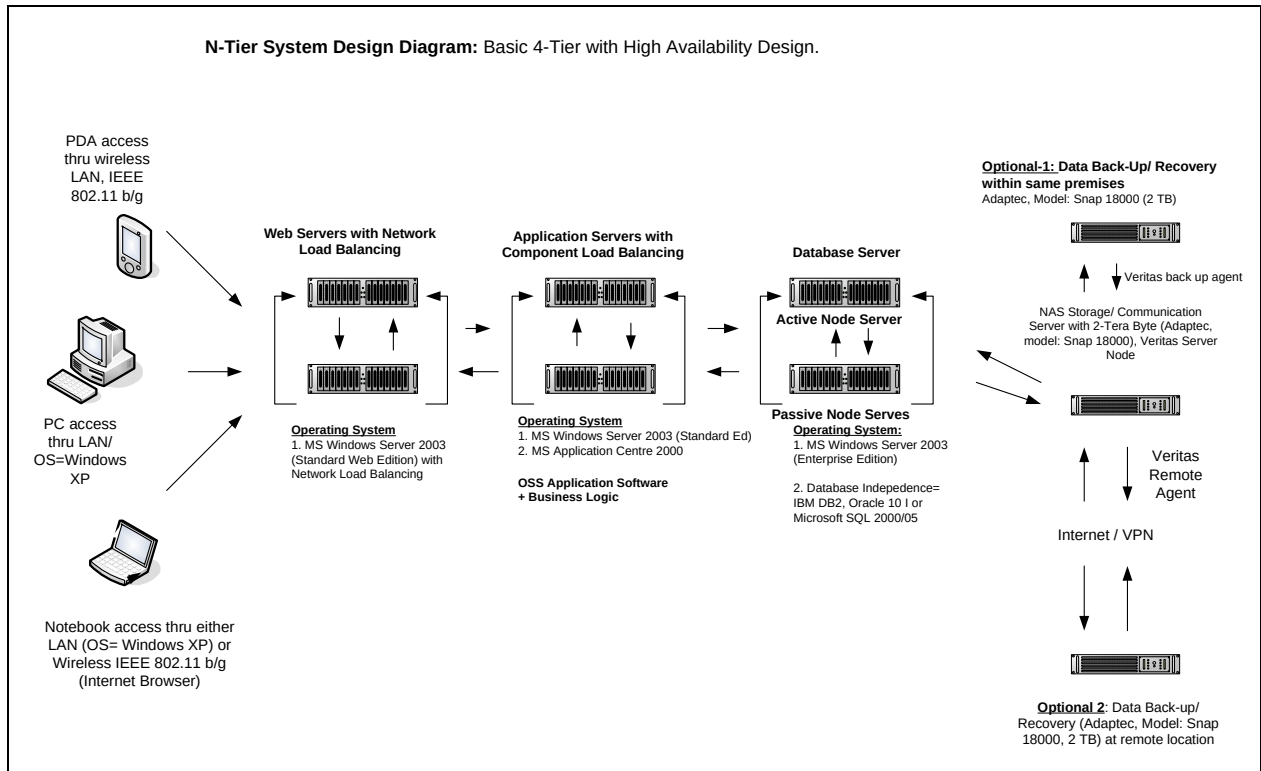
Drawing 3: **N-tier_ 2-Tier [Diagram II_A]**.



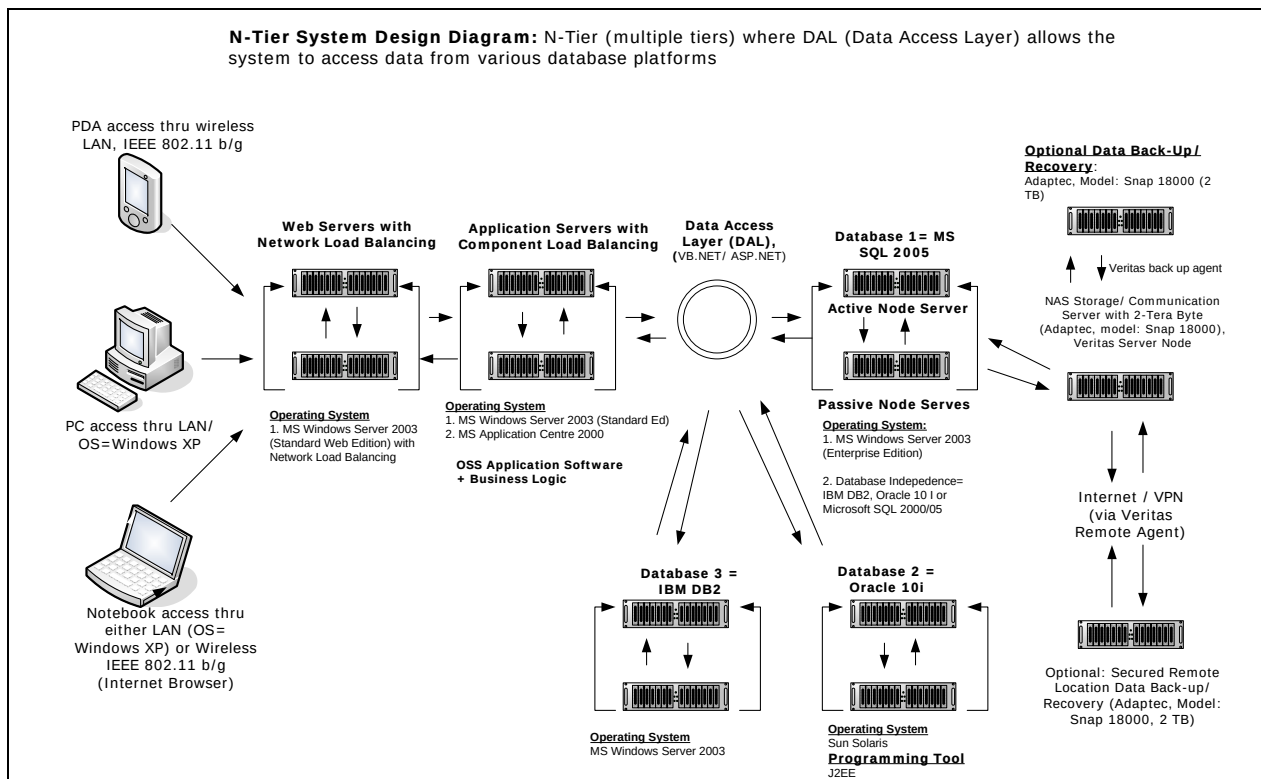
Drawing 4: **N-tier_3-Tier [Diagram II_B]**



Drawing 5: **N-Tier_4-Tier** [Diagram II_C]



Drawing 6: **N-Tier_SOAP_DAL As Separate Layer** [Diagram II_D]



Ultimate Hardware Scalability: The N-Tier Platform will allow client to scale up to 32 Web Servers and 12 Application Servers as indicated below

Up to 32 units of Web Servers with Network Load Balancing
Operating System
 1. MS Windows Server 2003 (Web Edition) with Network Load Balancing

Up to 12 units of Application Servers with Component Load Balancing
Operating System
 1. MS Windows Server 2003 (Standard Ed)
 2. MS Application Centre 2000
OSS Application Software + Business Logic

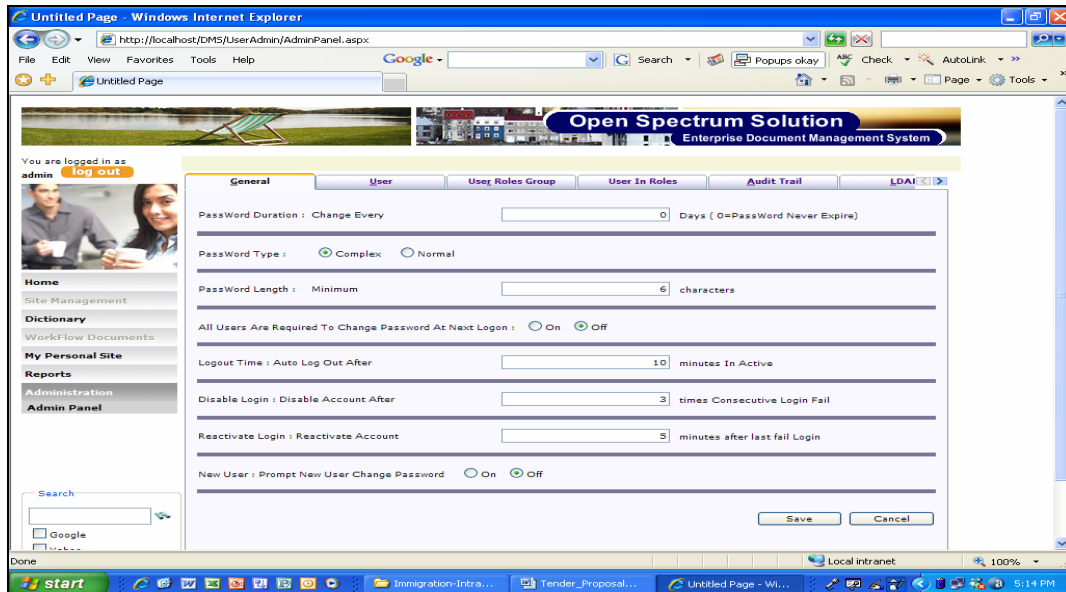
Database Server
Active Node
Passive Node
Operating System:
 1. MS Windows Server 2003 (Enterprise Edition)
2. Database Independence
 Client can choose any:
 - IBM DB2,
 - Oracle 10 g or
 - Microsoft SQL 2005

Optional 1: Data Back-Up/ Recovery within same premises
 Adaptec, Model: Snap 18000 (2 TB)

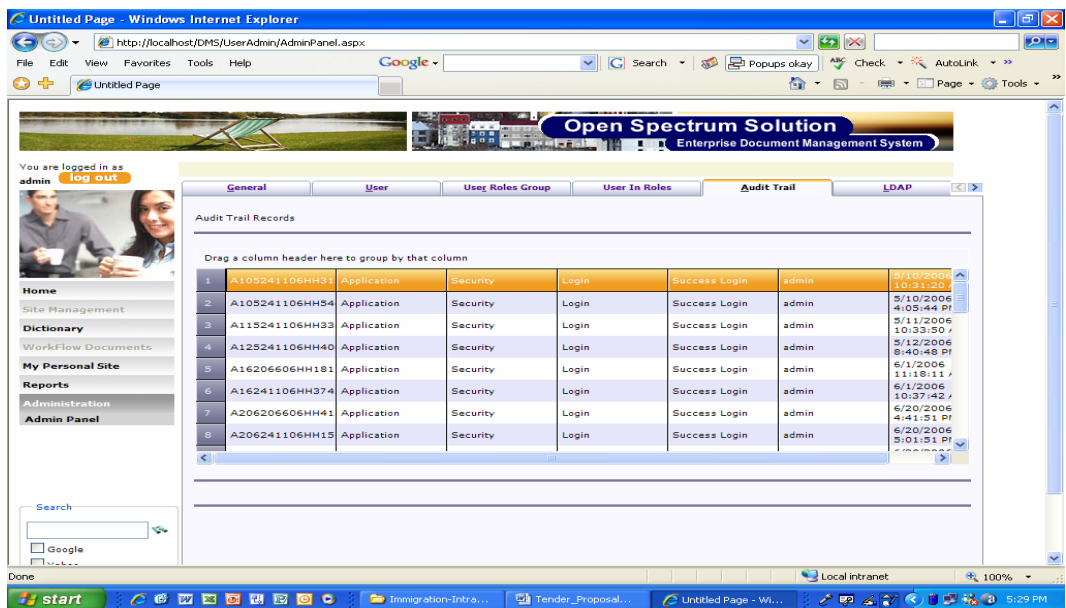
Optional 2: Secured Remote Location Data Back-up/ Recovery (Adaptec, Model: Snap 18000, 2 TB)

Diagram details: The architecture shows three tiers. The top tier consists of 32 Web Servers (labeled 1-32) with a vertical double-headed arrow indicating scalability. The middle tier consists of 12 Application Servers (labeled 1-12). The bottom tier consists of two Database Servers, one labeled 'Active Node' and the other 'Passive Node'. Client access is shown on the left: a PDA for wireless LAN (IEEE 802.11 b/g), a PC for LAN (OS=Windows XP), and a Notebook for either LAN (OS=Windows XP) or Wireless LAN (IEEE 802.11 b/g Internet Browser). On the right, 'Optional 1' shows a NAS Storage/Communication Server with 2-Tera Byte (Adaptec, model: Snap 18000), Veritas Server Node, and Veritas back up agent. 'Optional 2' shows a Secured Remote Location Data Back-up/ Recovery (Adaptec, Model: Snap 18000, 2 TB) connected via Internet / VPN.

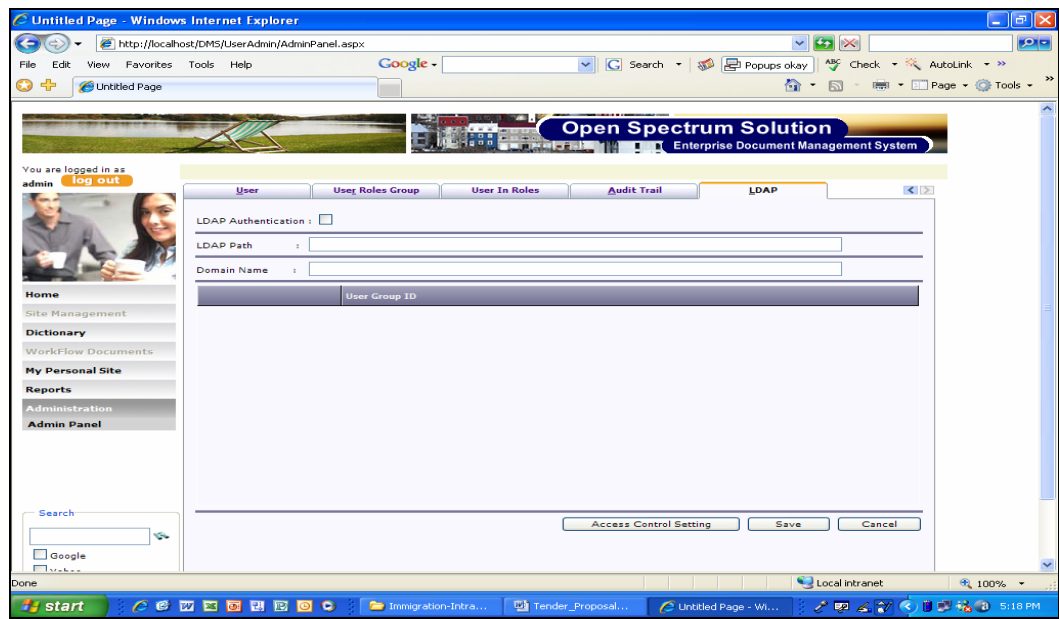
Drawing 8: System Security [Diagram IV_A].



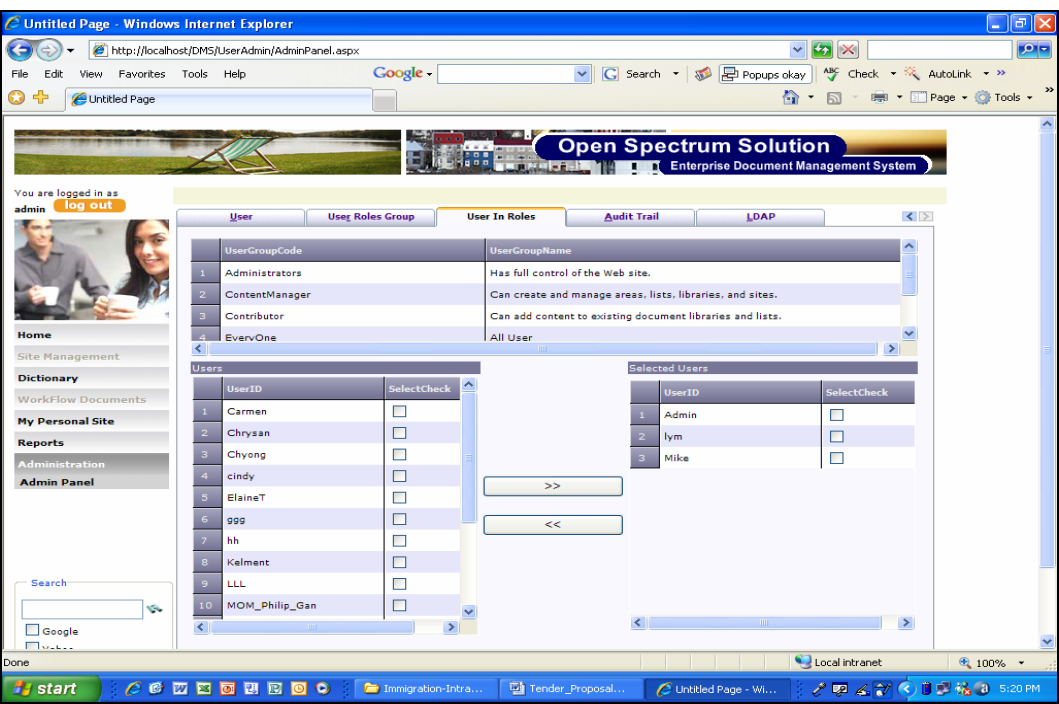
Drawing 9: Audit Trace & Track [Diagram IV_B].



Drawing 10: **LDAP (Lightweight Directory Access Protocol)** [Diagram IV_C].



Drawing 11: **Role Based Access Right Allocation & Administration** [Diagram IV_D].



Drawing 12: File Access Right Allocation & Administration [Diagram IV-E].



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