

Metodologi Pengembangan Sistem Manajemen Inventori Just-In-Time Menggunakan Internet Virtual Private Networks

Dodi Ibnu Fajar, author

Deskripsi Lengkap: <https://lib.ui.ac.id/detail?id=20376431&lokasi=lokal>

Abstrak

ABSTRAK

Zero inventory, zero defect, zero waste, dan zero lead time serta zero rework akan dapat dicapai dengan implementasi Sistem Manajemen Inventori (SMI) Just-InTime (JIT) yang terintegrasi dan terpadu dengan supplier dan distributor. Oleh karena bersifat inter-organisaional dibangun dengan menggunakan internet Virtual Private Networks (VPN). SMI JIT menggunakan internet VPN ini digunakan untuk sinkronisasi, simplifikasi dan "tracking" bersama proses inventori.

SMI JIT menggunakan internet VPN dibangun dengan pengembangan suatu subsistem aplikasi virtual warehouse dan virtual purchasing and order management yang berbasis internet (web), dan pembangunan internet VPN. Pembangunan internet VPN dilakukan dengan pembangunan tunelling dan remote access server (RAS). Tunneling dan RAS ini dilakukan dengan instalasi dan konfigurasi protokol PPTP (Point-to-Point Tunneling Protocol) , setting up RAS pada sistem operasi Windows NT ClientServer, Windows 95/98.

Keberhasilan pengembangan, implementasi, kemudahan operasi, keamanan (security), skalabilitas (scalability) dan interoperabilitas (interoperability) sebagai persyaratan VPN bergantung pada keberhasilan instalasi dan konfigurasi authentication, encryption dan PIX firewall. Juga bergantung pada konfigurasi koneksi dengan Internet Service Provider (ISP).

Pengembangan SMI JIT menggunakan internet VPN ini di PT. ISM dapat menyelesaikan masalah kedatangan rata-rata dua minggu lebih awal persediaan (inventori) bahan baku dari supplier, dan pemumpukan rata-rata 17%-20% produk MB di gudang karena belum dikirim ke distributor.

<hr>

ABSTRACT

Zero inventory, zero defect, zero waste, zero lead time and zero rework could be achieved by implementing Just-In-Time (JIT) Inventory Management System (IMS) that integrated with suppliers and distributors. Because of inter-organizational nature, this can be created with internet Virtual Private Networks (VPN). JIT-IMS running on internet VPN is utilized together to simplify, synchronize and track the inventory process.

JIT-IMS running on internet VPN, is built by developing virtual web based application subsystem and internet VPN. Virtual web based application are virtual warehouse, virtual purchasing and order management. Internet VPN is created by the installation and configuring of tunneling and remote access server (RAS). Tunneling and RAS are built by installation PPTP (Point-to-Point Tunneling Protocol) and

setting up RAS on Windows NT Client-Server, Windows 95/98.

The Success in the development, implementation and operation, security, scalability and interoperability depends on successfully installation and configuring authentication, encryption and PIX firewall; also depends on configuring connection to Internet Service Provider (ISP).

Development of JIT-SMI running on internet VPN at PT. ISM could solve average two weeks early receiving materials from it's suppliers and average 17% up to 20% of warehouse MB stock on hand inventory caused didn't delivery yet to it's distributor.