

智能输电系统解决方案

Intelligent Transmission System Solution

DF8000 SCADA/EMS 智能输电调度系统

DF8000 SCADA/EMS intelligent transmission dispatching system

系统概述

System overview

DF8000 SCADA/EMS 基于 CORBA 技术、符合 IEC 61970 标准，采用先进的数据库技术、面向对象技术、组件技术及 Internet 技术开发的新一代输电系统解决方案。

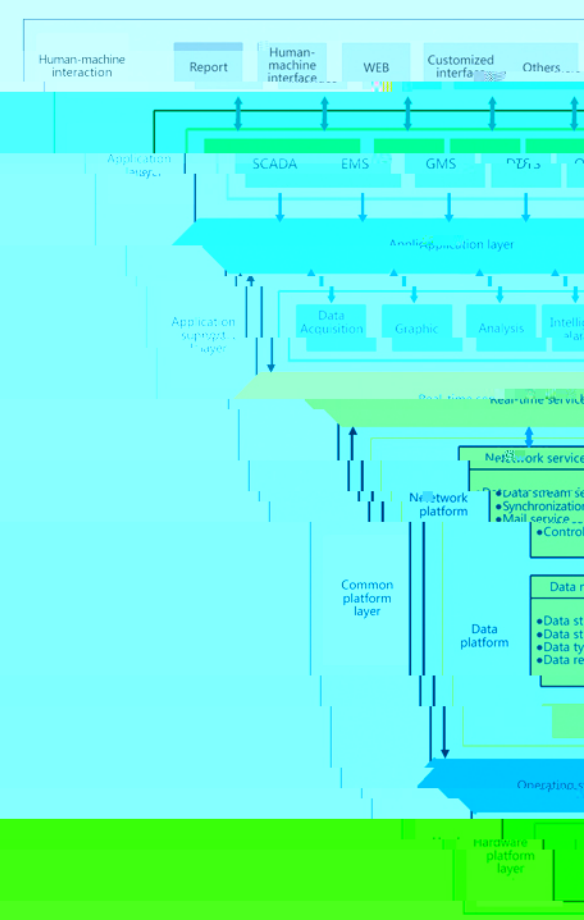
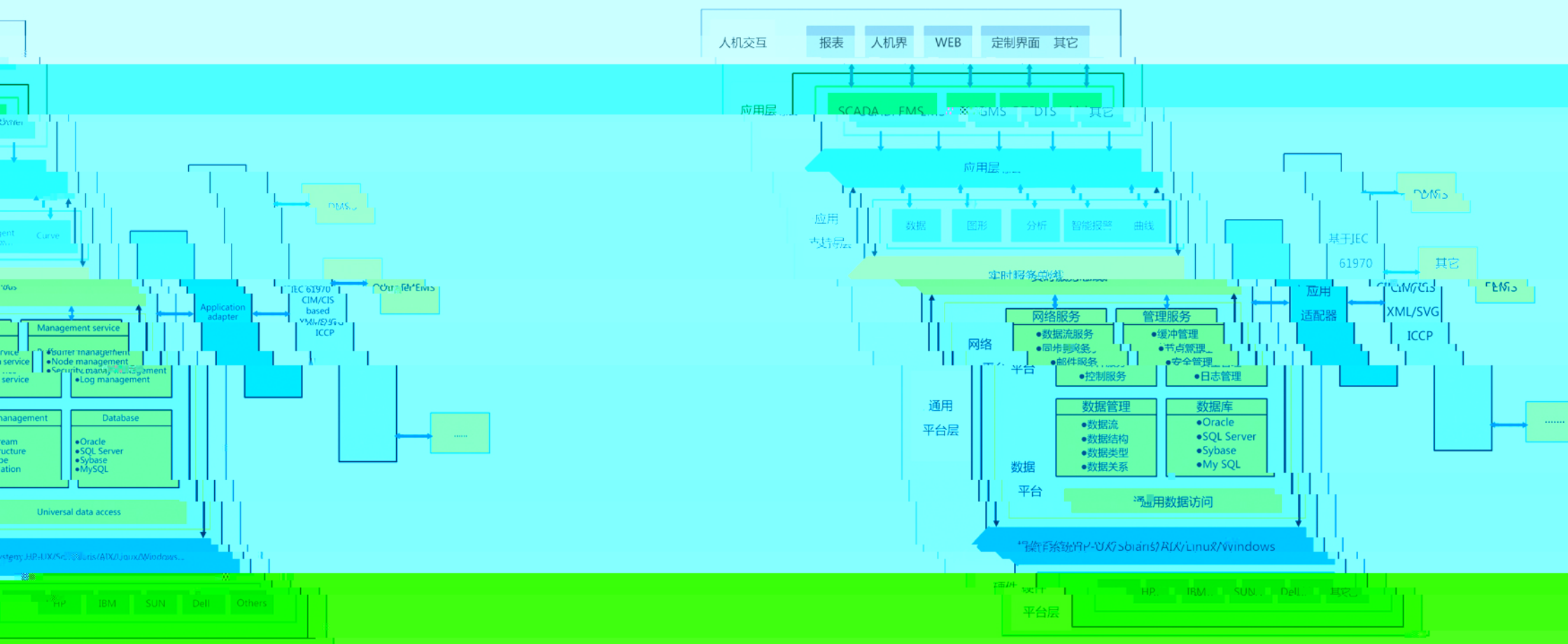
DF8000 SCADA/EMS system is developed under the unified platform and modularized design, covering the power generation control applications, power grid monitoring and control applications, operation analysis and optimization applications, incorporating the latest computer communication technology, database technology, object-oriented technology, component technology and Internet technology, so as to develop a new-generation transmission system...

DF8000 SCADA/EMS 基于统一平台和模块设计，涵盖了发电控制类应用、电网监控类应用、电网运行分析及优化应用、智能负荷控制辅助决策应用及电网仿真类应用等，即可解决用户在发电厂、电网侧的监视、控制及优化问题，又能通过模块化设计来充分保护用户投资。

DF8000 SCADA/EMS system is developed under the unified platform and modularized design, covering the power generation control applications, monitoring and control applications, operation analysis and optimization applications, load control and auxiliary decision-making applications and power grid simulation applications, etc. It can solve the monitoring, control and optimization problems on the power generation and transmission side for customers through the modular component technology.

软件架构

Software architecture



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DFE-ITSS000-SCADA/EMS智能输电系统解决方案

DFE-ITSS000-SCADA/EMS intelligent transmission system solution

系统特点

- 基于IEC62351和NERC安全标准设计
- 符合IEC61850标准，支持IEC61850智能变电站接入
- 快速定制开发非标准规约
- 基于IEC61850标准，支持IEC61850智能变电站接入
- 基于IEC61850标准，支持IEC61850智能变电站接入
- 支持系统硬件设备和操作系统的混搭，即确保系统安全性、易用性和可扩展性

Features

- Based on IEC62351 and NERC cyber security standards
- Powerful protocol library technology and enabling
- Based on IEC61850 standard, supporting IEC61850 intelligent substation connection
- Rapidly customized development of non-standard protocols
- Based on IEC61850 standard, supporting IEC61850 intelligent substation connection
- Support dual-activity mode of main and standby systems, ensuring system security, usability and scalability

系统主要功能模块

Main functional modules

Main functions	应用类别	应用功能	Application
Basic monitoring, alarm, data processing, report, remote maintenance and WEB	基础应用	报警、远程维护与WEB	基础应用
Network topology, state estimation, Powerflow, short circuit analysis, Contingency analysis, static voltage stability, Transient stability, Optimal power flow, AVC	网络分析	网络拓扑、潮流计算、安全分析、暂态电压稳定、暂态稳定、灵敏度分析、最优潮流、自动电压无功控制	网络分析与优化
Load forecasting, AGC, Reserve monitor, Economic dispatch, generation scheduling, Interchange transaction scheduling, Maintenance scheduling, production cost analysis	发电控制	负荷预测、自动发电控制、备用监视、经济调度、发电计划、交换计划、检修计划、发电费用分析	发电控制与调度
Power outage range analysis, power outage restoration, overload transferring, intelligent aid decision making	输电辅助决策	输电范围分析、输电负荷转移、智能辅助决策	输电辅助决策
Steady-state simulation, Dynamic-state simulation, Dispatcher training, Evaluation of training results, Test mode	培训仿真	稳态仿真、动态仿真、调度员培训、培训结果评估、测试态	培训仿真