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Human Resources Company Network Set Up Principles

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Abstract: **Resent years, we are faced with the aging population problem which is serious. So, how can we use the limited manpower in a high-efficiency became a serious problem. Human Resource Company Network is an Information Management System aggregation which utilizes hardware and software to manage the human resource that can help different size companies and government department.**

Keywords: **Human Resource Company Network, hardware and software to manage the human resource.**

1. MAIN DISCUSSIONS

Summary:

There are three directions to Human Resource Company Network. Human Resource Company Network support the service for Human Resource Companies. Firstly, it can help the communication in company interior. Secondly, it can provide the human resource information to help the study and cooperation works.

Human Resource Company Network can ensure the security of information from outside. The most important information can only transfer in company.

Human Resource Company Network refers to the use of network equipment, communication media, network technology, protocol and all kinds of management system software and application software, computers and a variety of terminal equipment integrated together.

2. TECHNICAL SUPPORT

VLAN:

VLAN (Virtual Local Area Network) is a switched LAN based on the logically divided into one segment. Although the site is a collection of some of the terminal, but any device anywhere on the network can become a member of any VLAN, this is the only member of the VLAN to hear the broadcast communication sent by the other members of the VLAN, and cannot hear the other VLAN communications. VLAN features seen by an internal VLAN broadcast and unique traffic will not be forwarded to another VLAN, thereby helping to control the flow, reduce equipment investment, simplify network management, and increase network security. This is the advantage of VLAN division. Basing on its complexity, VLAN have used several types: Port-based VLAN, VLAN MAC layer, based VLAN IP address**.**

VTP:

It is a second layer of the OSI reference model communication protocol used to establish managed within the same domain of network-wide VLANs, delete and rename. When you set up a new VLAN on one VTP Server, the configuration of the VLAN is automatically propagated to all other switches in this domain. The switch will automatically receive configuration information to the VLAN and VTP Server configuration consistent. Thereby reducing the workload of the same VLAN configuration information on multiple devices, and maintain the unity of the VLAN configuration.

VTP VLAN configuration to maintain the unity of the network (ISL frames or CISCO private DTP frames). VTP management at the system level to add, delete, adjust the VLAN, the information automatically to other switches in the network broadcast. In addition, VTP configuration reduces the security problems that could cause. Easy to manage, as long as the VTP server settings accordingly, VTP client will automatically learn information from VTP server.

TCP/IP:

Transmission Control Protocol / Internet Protocol, otherwise known as Internet protocol network, is the most basic Internet protocols, basic Internet by the network layer of the IP protocol and TCP transport layer protocol components. TCP / IP defines how electronic devices connected to the Internet, and how the standard data transmission between them. Popular terms: TCP is responsible for the transmission of problems found, there is a problem on the issue of a signal retransmission request until all data are transmitted to the destination safely and correctly. The IP is tantamount to give each computer provides an Internet address.

Spanning Tree Protocol:

Spanning Tree Bridge Protocol STP (Spanning Tree Protocol) spanning guarantee it by generating a bridge along a ring been recognized for work in a dynamic network topology. Bridges exchange BPDU messages with other bridges to monitor the loop, and then close the selected bridge interfaces cancel the loop, the system refers to the IEEE802·1 standard Spanning Tree Protocol and early digital devices spanning cooperation protocol, which is built on the latter produced. IEEE version of the Spanning Tree Protocol support bridge area, which allows the bridge in an extended local network construction freedom ring topology. IEEE Spanning Tree Protocol version is usually preferred version on digital versions.

The main function of the spanning tree protocol, there are two: First, use the spanning tree algorithm, Ethernet, create a certain port on a switch to the root of the spanning tree to avoid loops. Second, when the Ethernet topology changes, convergence is achieved by the spanning tree protocol protection purposes.

Port Fast:

By default, all switch ports are assumed to be connected with a switch or bridge, so all ports are running STP algorithm, that is, if the network changes, before the port to send data to wait 50s, and the fact that many ports will be directly connect workstations or servers. So we use these ports PortFast allows time savings Listening and Learning states, immediately enters the Forwarding state. Note: PortFast only allow port in case of changes in the network environment directly into the Forwarding state. The port is still running STP, so if a loop is detected, the port will become Blocking Forwarding state by state.

PortFast Fast Port is a characteristic of a Catalyst, can make the switch or trunk port listens to skip the learning state into STP forwarding state on IOS based switches, PortFast can only be used to connect to an access port on the terminal workstation.

When a device is connected to a port, a port normally enters the listening state. When the forward delay timer expires, the state entered the study, when forwarding a second delay timer expires, the port into forwarding or blocking state, when a switch or trunk port to enable PortFast, port forwarding state immediately, but the switch detects to link the port to the forwarding state (2s after the cable plug). If the port detects a loop at the same time enable the PortFast feature. It enters the blocking state. It is important to note that the value will take effect at the time of PortFast port initialization. If for some reason the port was forced to enter the blocked state, then they need to return to the forwarding state, still have to go through the normal listening.

Enabling PortFast main reason is to prevent start-up period of less than 30s of PC and switch ports required to connect the state never entered into the forwarding state, some cards until the MAC layer software driver is actually loading will start after the link. In this case it will lead to some failures, such as DHCP environment, it may be some problems.

Port Security:

Port Security feature to remember is connected to a switch port Ethernet MAC address of the network card number, and only agreed to a MAC address through this port communication. If any other MAC address tries to communicate through

this port, the port security feature will prevent it. Use Port Security feature prevents certain devices to access the network, and enhance security.

HSRP:

Hot Standby Router Protocol is a unique technology on CISCO platform, which is CISCO proprietary protocol.

The agreement contains multiple routers, corresponding to a HSRP group. The group has only one router forwards assume responsibility user traffic, which is the active router. When the active router fails, the backup router will assume the responsibility to become the new active router. This is the principle of hot backup.

Realize that there are multiple conditions HSRP router system, they form a "hot backup group", and the group forms a virtual router. At any one time, only one router within a group is active, by which to forward packets, if the active router fails, a backup router will choose to replace the active router, but the hosts within the network view, virtual router has not changed. So the host remains connected, no fault of being affected, so you can solve the problem router switch.

To reduce network traffic data, after setting the active router and the backup router, only the active router and the backup router periodically sends HSRP packets. If the active router fails, the standby router takes over the active router. If the backup router fails or becomes the active router, the router was chosen by another backup router.

In a particular LAN practical, there may be more than one hot backup groups coexist or overlap. Each hot backup group to mimic a virtual router, which has a Well-known-MAC address and an IP address. The IP address of the router interface address within the group, hosts in the same subnet, but not the same. When a LAN has multiple hot standby group exists to host distributed to different hot backup group, you can get the load balancing.

Access-List:

Access-List is the manager added a series of control packets in the router input and output rules. It is not generated by the router itself. Access-List can allow or block packets entering or output to the destination. Access-List entries are executed sequentially, that is, when a packet arrives, first to see if it is constrained by the entry of the first, if it is, and then down the execution order; if it matches with the first entry, regardless is allowed or prohibited, are no longer perform the checks following entries.

3. THE PRINCIPLE OF NETWORK LAYOUT

Setting up a LAN should be based on how much room the size of the device to the specific implementation, according to the characteristics of network cabling to play practicality network layout is very important. Network, servers and other equipment placement should be integrated, network layout to be thoughtful, try to make a variety of equipment and wiring system in a reasonable position.

No matter what the layout of the network is, the ultimate goal is to ensure that all equipment of our LAN reliably stable operation, so that the network can operate normally.

Networking network is not static, as the IT companies evolving needs of business, originally established local area network on the need to constantly improve and expand; in the daily operation and maintenance of the network, planning the network layout should be considered to facilitate later network maintenance and upgrade operations.

4. NETWORK ORGANIZATION OF HUMAN RESOURCES MANAGEMENT FEATURES

Network organization of human resource management body has certain peculiarities. First, the network organization of human resources management body has dispersed. As the network is not a unified organization under the authority of the ownership entity, but connected by a variety of contracts, property rights owned by independent companies formed aggregates. This makes it difficult to find a separate entity corresponding behavior exists in reality. In fact from the operation of the special nature of the network organization, we can be found in the operation was a member of the company jointly to influence the network organization based on formal contracts and implied contracts. Therefore, members of the network within the enterprise network as a whole should be the core organization of human resources management. Only members of the cooperative enterprises in the network, member firms will be able to impact the network organization of human resources, in addition to the members of the company's human resources are not affected

by the network organization. Second, the network organization of human resources management body has diversity. In practice, not just members of the network organization composed by the enterprise. R & D alliances Colonel university-enterprise cooperation, SME cluster structure of intermediary services, local government and other organizations can be viewed as a member of the network. Therefore, in view of the organization as a network of interactive environments - Enterprise ecological communities to understand the policy of non-corporate body brought about by environmental considerations into the network organization of human resource management, study the combined effect of their interaction, they are bound to These organizations take into account the organization of human resource management of the main network.

From a management point of view the object, the network organization of human resource management is the subject of the internal corporate network organization staff members combined. It also takes such entire network from the point of view of the organization, prone to long lead member companies to employees and other issues. This difference comes from the decomposition of the difference and the rights and responsibilities of employers and employees within the enterprise correspond to the separate members of the organizational culture, values, management systems, and other aspects of work. Especially for staff working directly in contact with the joint work objectives, and how to work together to achieve maximum efficiency in the shortest possible time, and how to maximize the elimination of these differences, determine job role, often the core of the network organization of human resources management issue.

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