

廈門大學



信息学院软件工程系

《计算机网络》实验报告

题 目 实验七 应用层协议服务配置

班 级 软件工程 2018 级 1 班

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学 号 24320182203335

实验时间 2020 年 5 月 6 日

2020 年 5 月 18 日

1 实验目的

配置服务器

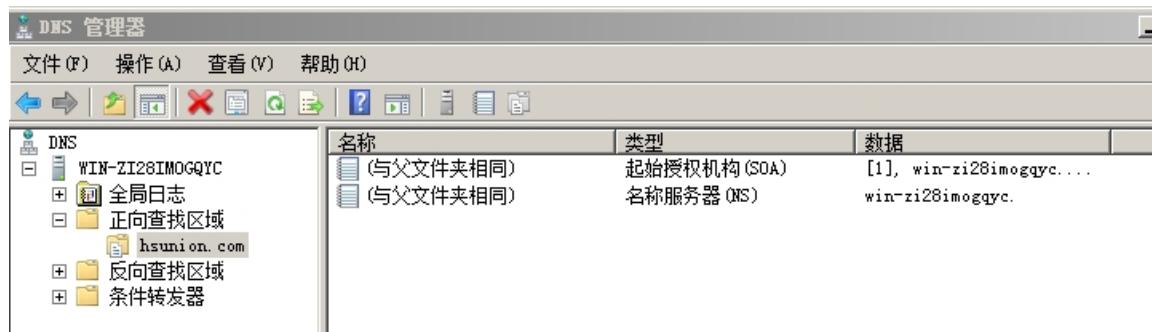
2 实验环境

Windows Server 2008 Windows Server 2008 R2 Windows Server 2012

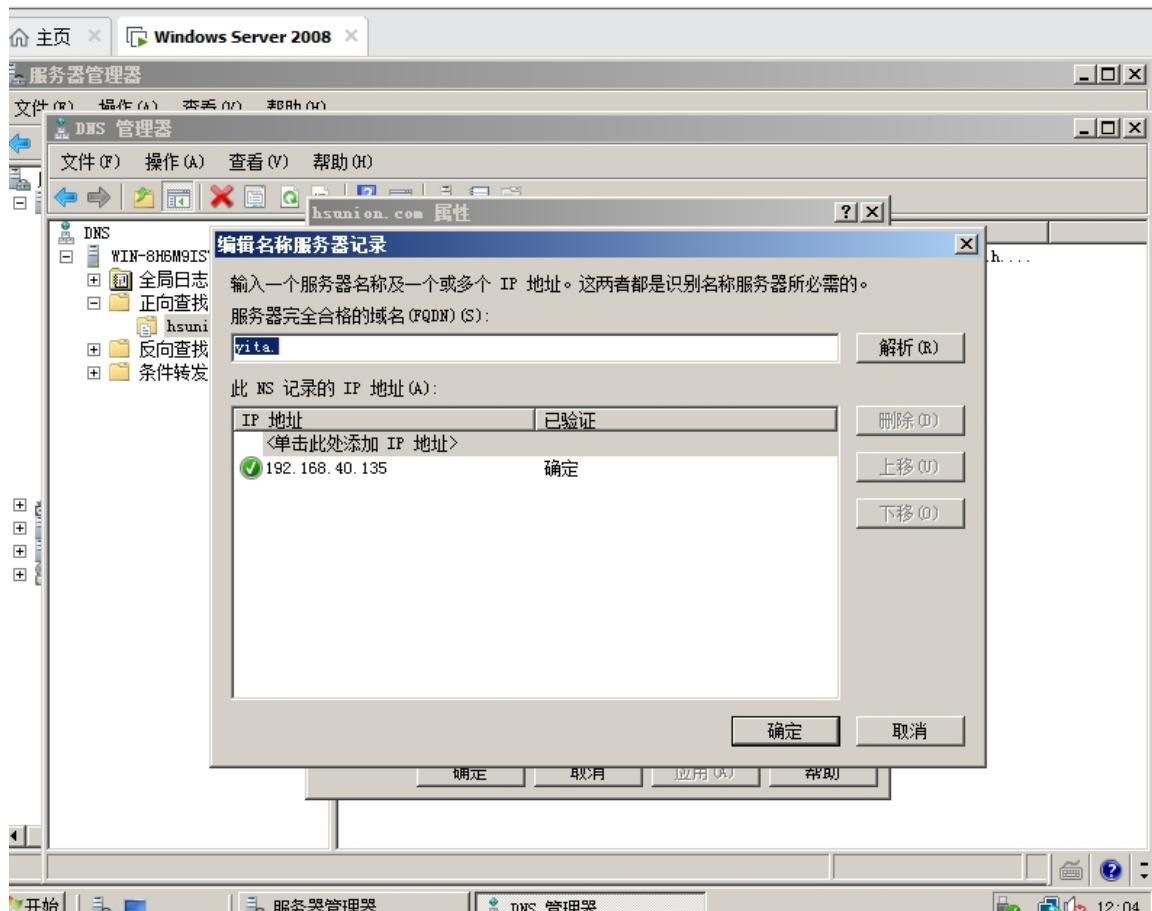
3 实验结果

(1) DNS 服务器

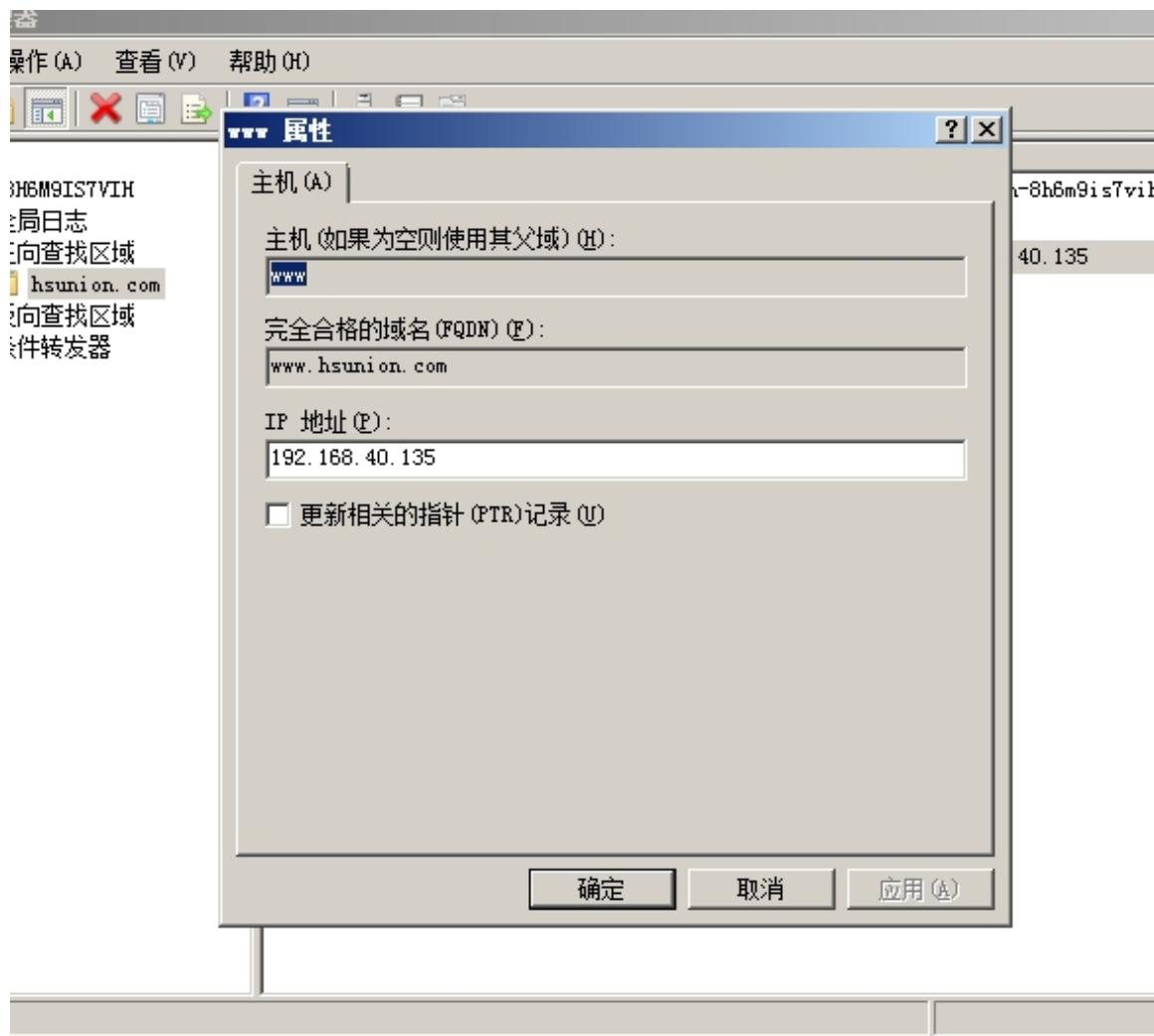
新建主要区域 hsunion.com



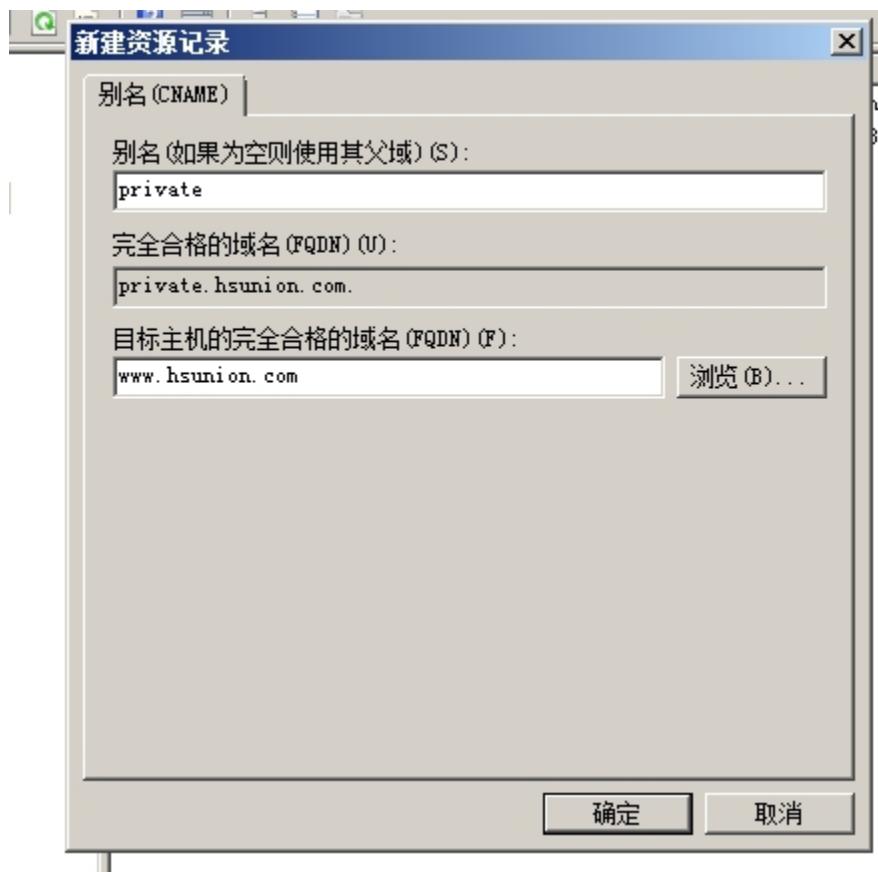
与 IP 对应: 192.168.40.135



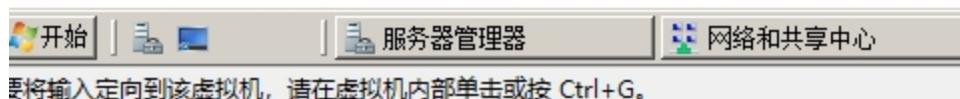
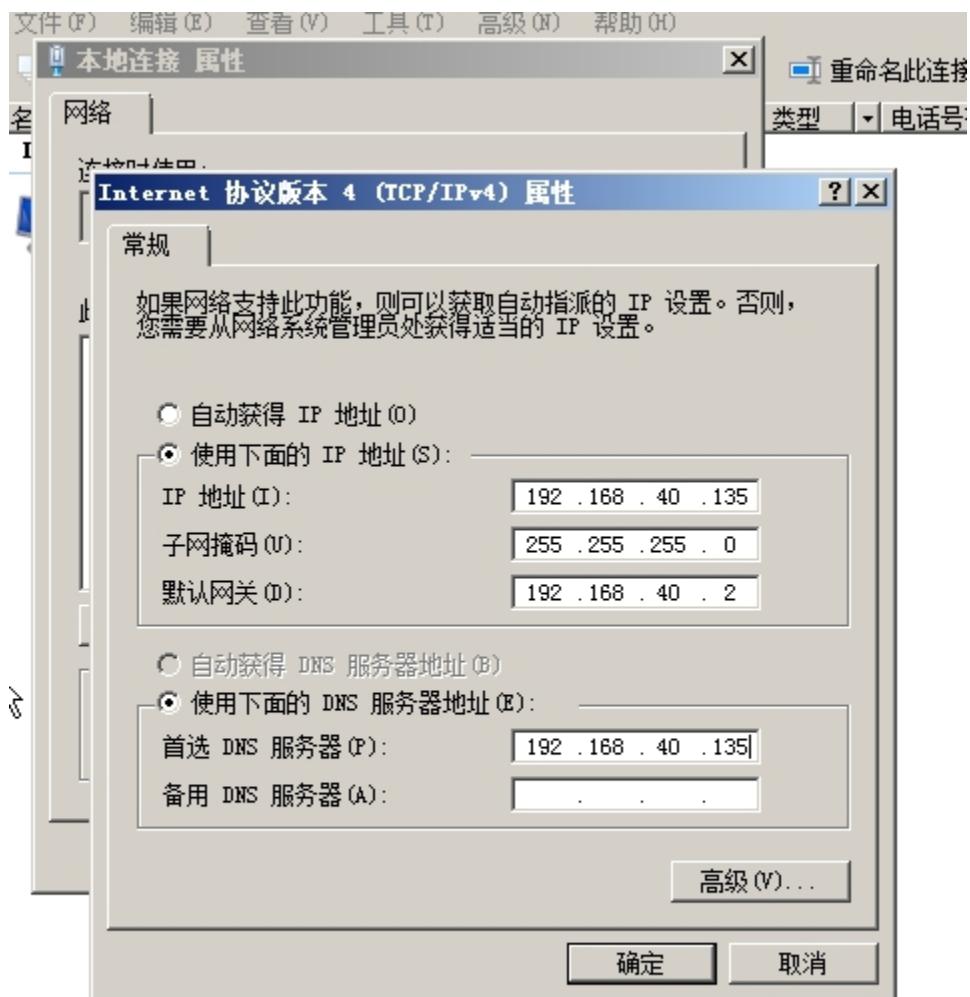
新建服务器主机



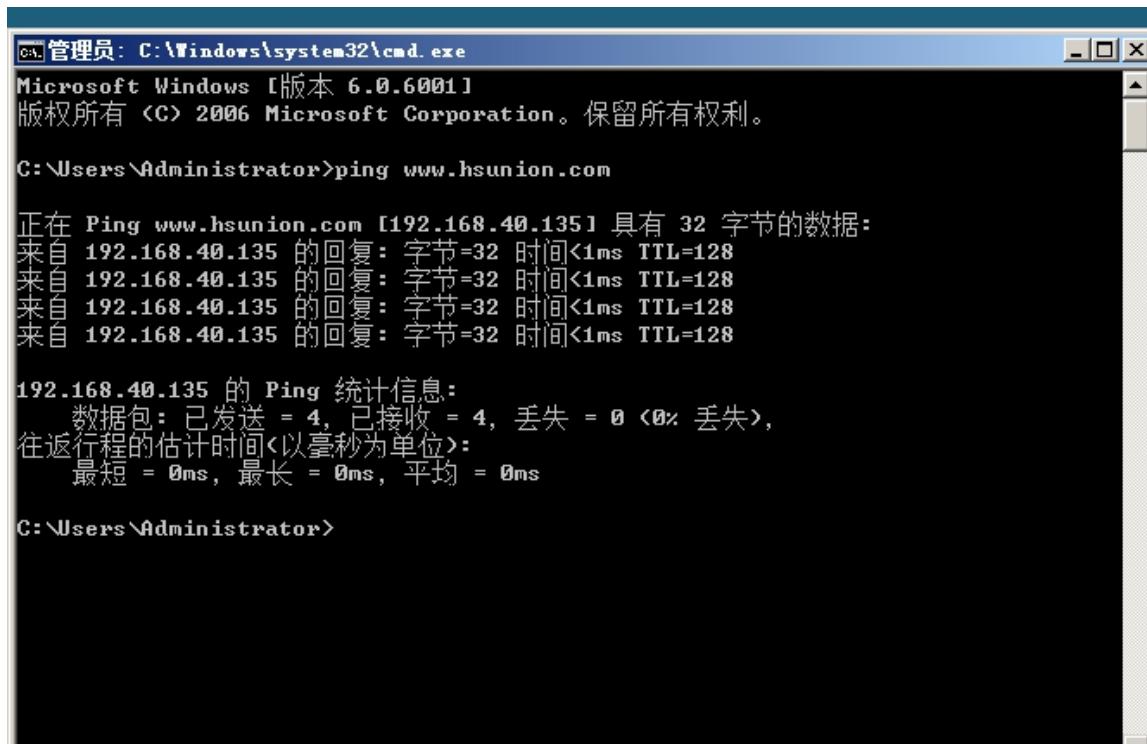
新建服务器别名：



添加 DNS 服务器地址:



测试 DNS 配置是否成功：



```
管理员: C:\Windows\system32\cmd.exe
Microsoft Windows [版本 6.0.6001]
版权所有 © 2006 Microsoft Corporation。保留所有权利。

C:\Users\Administrator>ping www.hsunion.com

正在 Ping www.hsunion.com [192.168.40.135] 具有 32 字节的数据:
来自 192.168.40.135 的回复: 字节=32 时间<1ms TTL=128

192.168.40.135 的 Ping 统计信息:
    数据包: 已发送 = 4, 已接收 = 4, 丢失 = 0 <0% 丢失>,
往返行程的估计时间<以毫秒为单位>:
    最短 = 0ms, 最长 = 0ms, 平均 = 0ms

C:\Users\Administrator>
```

(2) Web 服务器

设定端口、IP 和主目录

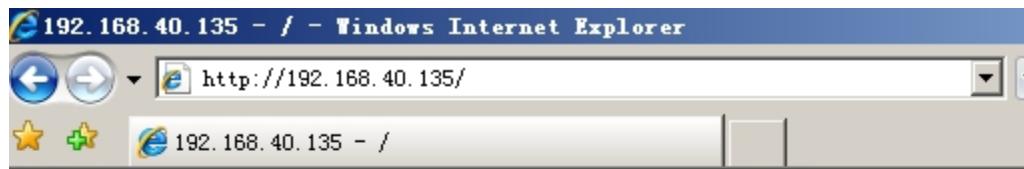




启用匿名浏览



测试架构:



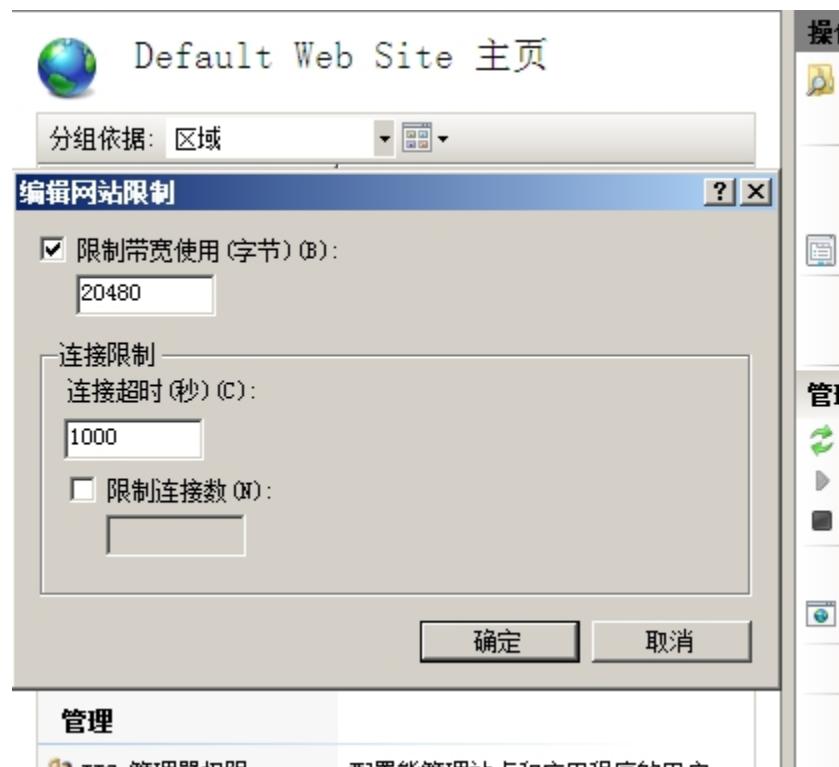
192.168.40.135 - /

2020/5/17 12:15 168 [web.config](#)

启用和停止



控制流量



安全性

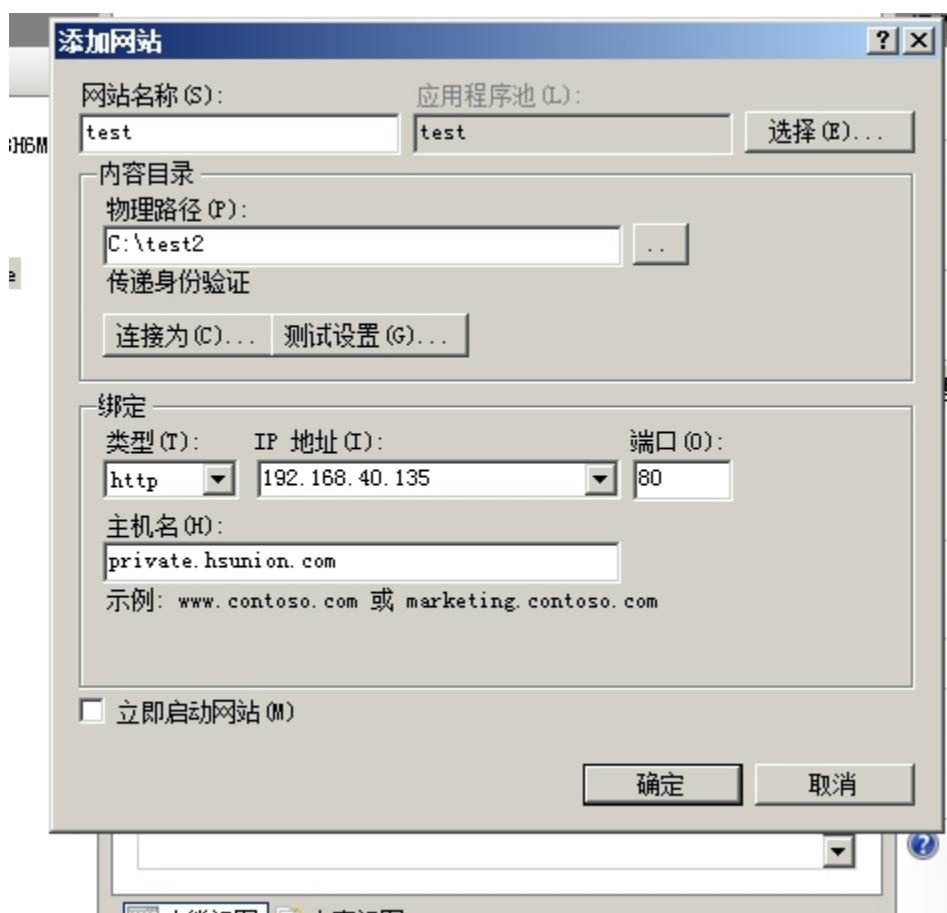
分组依据: 不进行分组		
名称	状态	响应类型
ASP.NET 模拟	已禁用	
Forms 身份验证	已禁用	HTTP 302
Windows 身份验证	已禁用	HTTP 401
基本身份验证	已禁用	HTTP 401
匿名身份验证	已启用	
摘要式身份验证	已禁用	HTTP 401

(3) 虚拟主机技术

添加



添加其他的站点，设置相同的 IP 和端口号，不同的主机头值



测试站点:



private.hsunion.com - /

2020/5/17 12:45 168 [web.config](#)

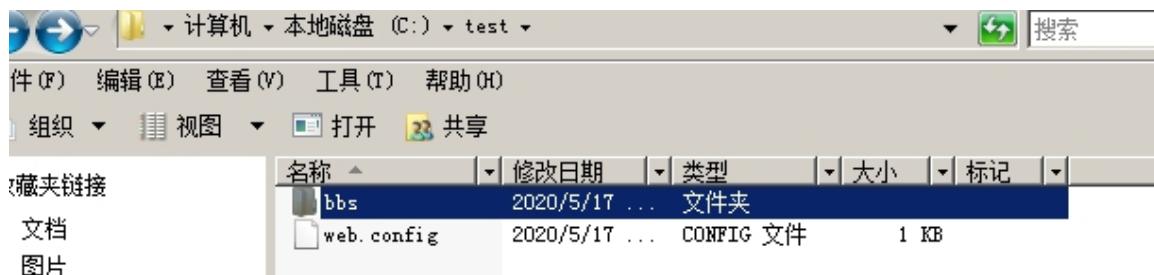


www.hsunion.com - /

2020/5/17 12:15 168 [web.config](#)

BBS 服务器

安装



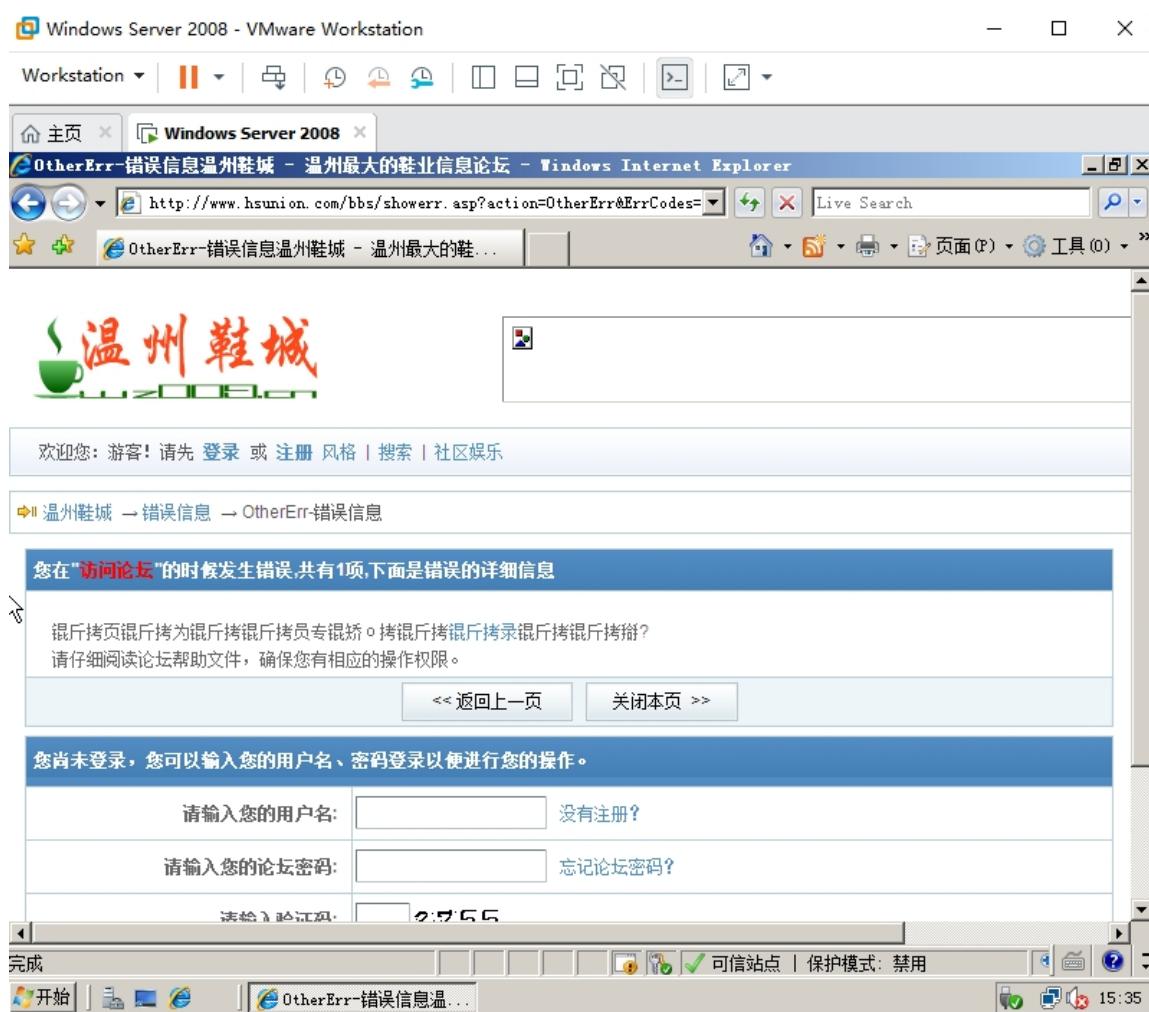
启用 ASP



启用父路径



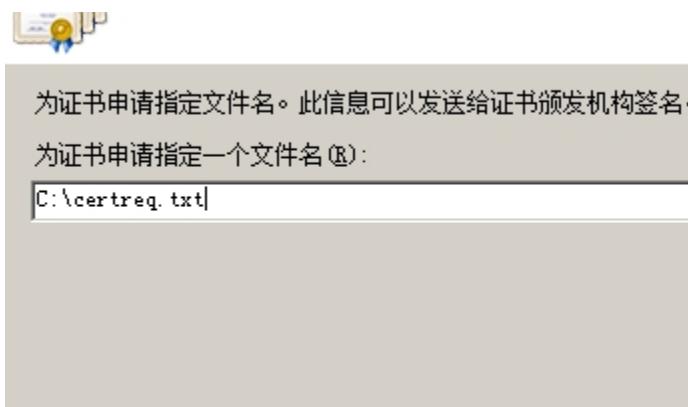
启动 BBS



(5) 安全站点



申请证书

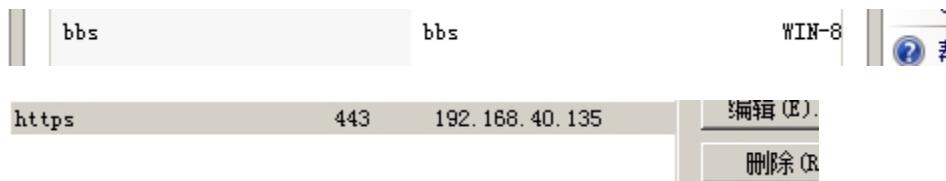




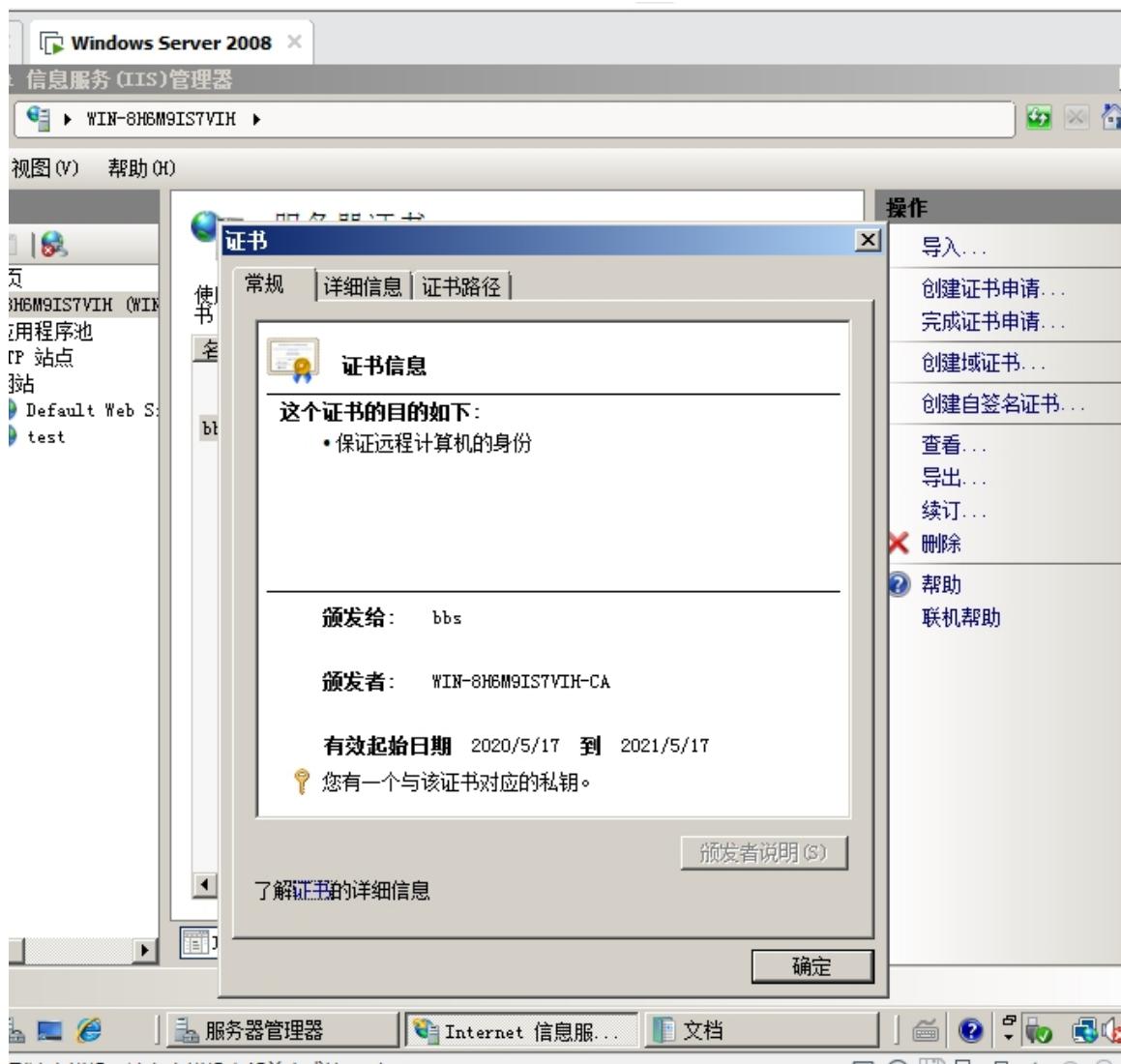
```
-----BEGIN NEW CERTIFICATE REQUEST-----
MIIDVjCCAr8CAQAwYTELMakGA1UEBhMCQ04xEjAQBgNVBAgMCeWxseilv+ecgTES
MBAGA1UEBwwJ5aSn5ZCM5biCMQ4wDAYDVQQDAV0ZXNOMjEMMAoGA1UECwwDZXN0
MQwwCgyDVQQDDAniYnMwgZ8wDQYJKoZIhvcNAQEBBQADgY0AMIGJAoGBAiVFKB80
YY58FqNe3Ev4S+XL1CVawEjqiH5+2yn0qpvPW/f5s4qkdm/z63qJy0zALemhyvoL
/MN5uLQ4vVYB2B6i0ZRc61Uc6iP+NWST14+UcEQ8vGfLJmpsNyHRqgSIH01WOSgM
rWCcX07ChtzVaKDDDA3B5dvUtcEjkb7/oYd9AgMBAAGgggGzMBoGCisGAQQBgjcN
AgMxDByKNi4wLjYwMDEuMjBPBgkrBgEEAYI3FRQxQ.jBAAgEFDA9XSU4tOEg2TT1J
UzdWSUgMHVdTJi04SDZNOU1TN1ZJSFxBG1pbmlzdHJhdG9yDATJbmVOTWdyLmV4
ZTByBgorBgEEAYI3DQICMWQwYgIBAR5aAE0AaQBjAHIAbwBzAG8AZgB0ACAAUgBT
AEEAIABTAEMAaAbhAG4AbgB1AGwAIABDAHIaEQBwAHQAbwBnAHIAYQBwAGgAaQBj
ACAAUAByAG8AdgBpAGQAZQByAwEAMIHPBgvkhkiG9w0BCQ4xgcEwgb4wDgYDVR0P
AQH/BAQDAgTwMBMGA1UdJQQMMAoGCCsGAQUFBwMBMHgGCSqGSiB3DQEJDwRrMGkw
DgYIKoZIhvcNAwICAgCAMA4GCCqGSiB3DQMEAgiAgDALBglghkgBZQMEAowCwYJ
YIZIAWUDBAEtMAsgCWCASF1AwQBAjALBglghkgBZQMEAQUwBwYFKw4DAgcwCgYI
KoZIhvcNAwcwHQYDVR0OBBYEFKHFRE9i0nw4DtvpM0Ik9kaMFBNMAOGCSqGSiB3
DQEBBQUAA4GBABUW782nKUIqGZcOpJLYUiR1d335HKZGaCD1411o3aeSOYjcdK74
gf6rhRItt5McLGO1T9Pwt7KWZyXyJvWOI5VNiN0i7j0i48OPF2Qd71GcORzF/Dek
bAloqXEtwzRCRYZk5JkGK11jEMzUjLnUIFeu4h7tzVJqzTBWdwrn9u2i
-----END NEW CERTIFICATE REQUEST-----
```

签发服务器证书见（6）

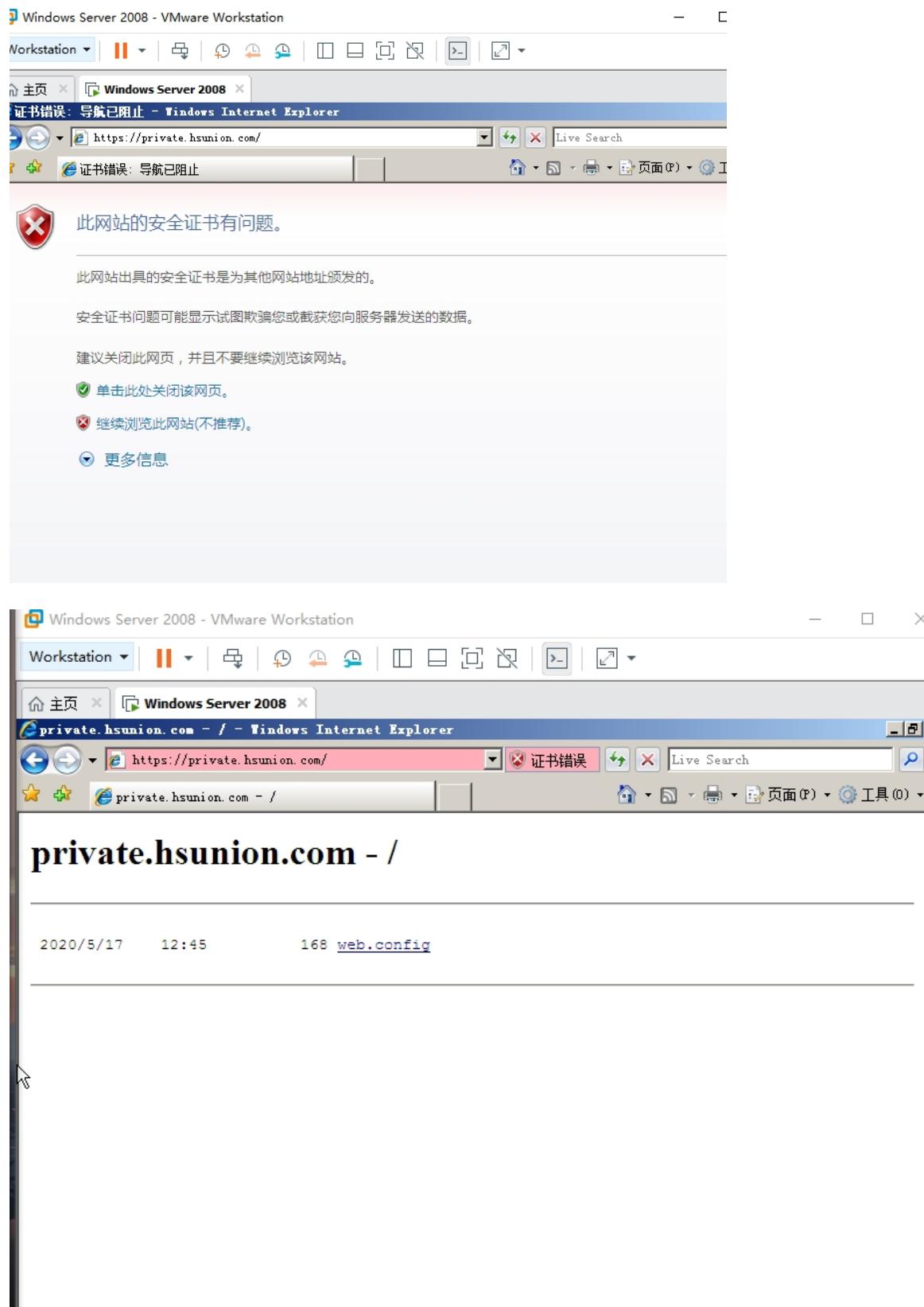
导入证书



查看证书



测试该站点



(6) 证书服务器

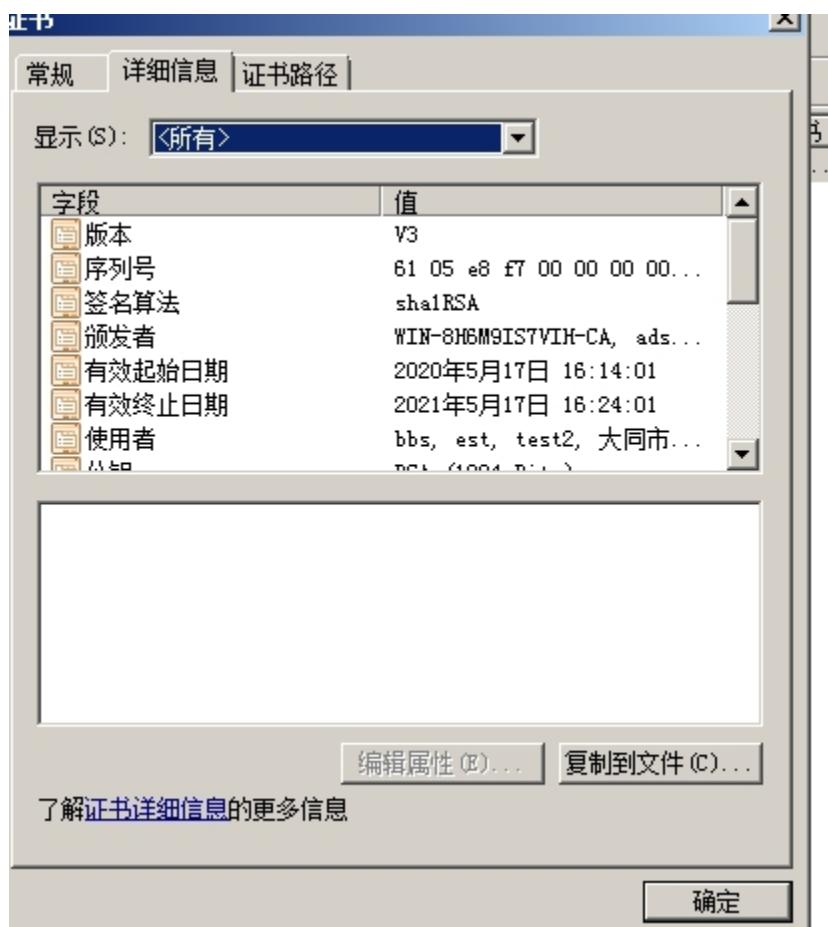
提交一个新的申请

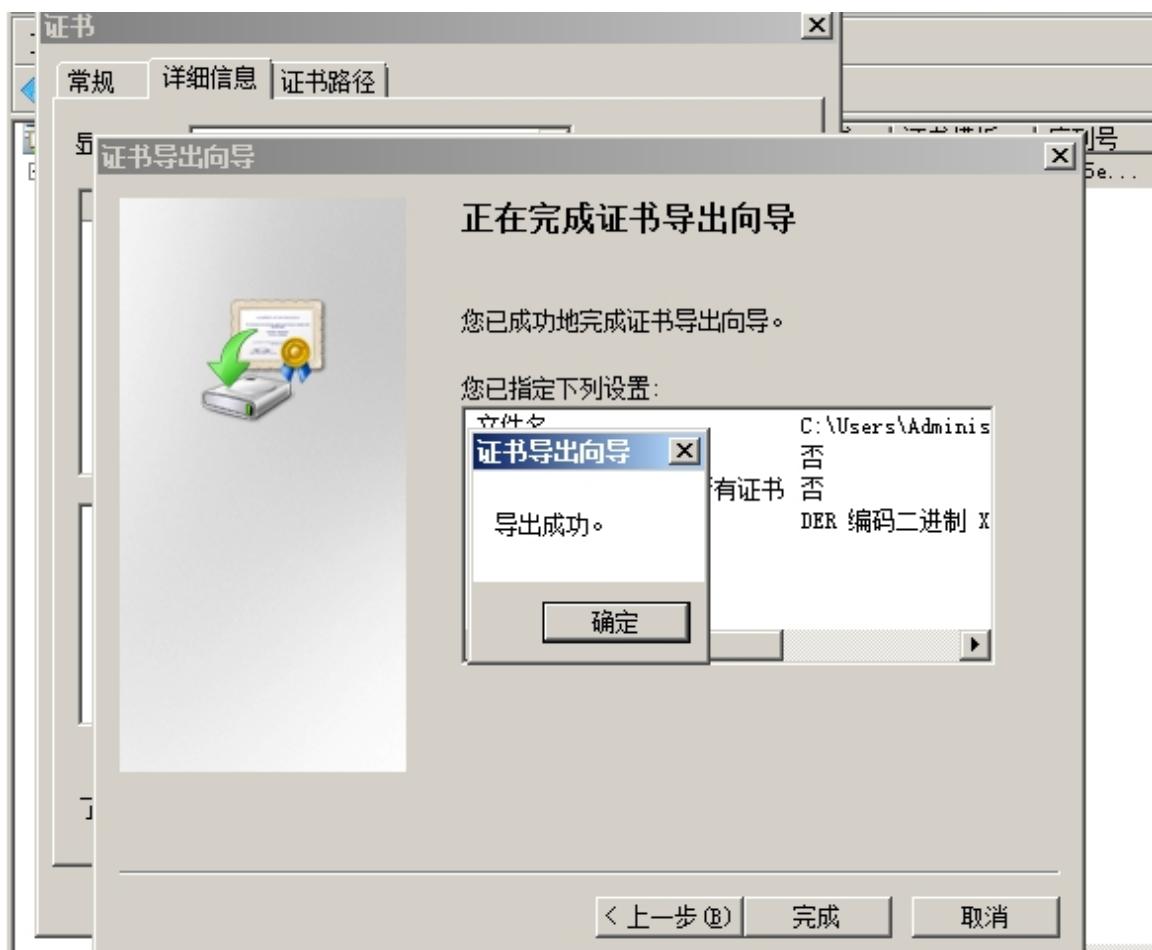


颁发



导出





通过 web 方式申请并颁发证书

The screenshot shows a Microsoft Internet Explorer window with the title bar "Microsoft Active Directory 证书服务 - Windows Internet Explorer". The address bar contains the URL "http://www.hsunion.com/certsrv/". The toolbar includes standard buttons for back, forward, search, and refresh, along with links for Favorites, Recommended Sites, and Web Clips. The menu bar has options like Home, Stop, Refresh, Page, Security, Tools, and Help. The main content area displays the "Microsoft Active Directory 证书服务 -- WIN-F33K8475ETA-CA" header. Below it, a section titled "欢迎使用" (Welcome) provides instructions for users to apply for certificates or check their status. A link to "Active Directory 证书服务文档" (Active Directory Certificate Service documentation) is also present. A "选择一个任务:" (Select a task) section lists three options: "申请证书" (Apply for certificate), "查看挂起的证书申请的状态" (Check the status of pending certificate requests), and "下载 CA 证书、证书链或 CRL" (Download CA certificate, certificate chain, or CRL). A vertical black bar is visible on the left side of the browser window.

The screenshot shows a Microsoft Internet Explorer window with the title bar "Microsoft Active Directory 证书服务 - Windows Internet Explorer". The address bar contains the URL "http://www.hsunion.com/certsrv/". The toolbar and menu bar are identical to the previous screenshot. The main content area displays the "Microsoft Active Directory 证书服务 -- WIN-F33K8475ETA-CA" header. Below it, a section titled "证书正在挂起" (Certificate is pending) informs the user that their certificate application has been received and they must wait for an administrator to issue the certificate. It also states that the application ID is 4. A note at the bottom advises users to return to the site within 10 days to retrieve their certificate. A vertical black bar is visible on the left side of the browser window.



Microsoft Active Directory 证书服务 -- WIN-F33K8475ETA-C

证书已颁发

您申请的证书已颁发给您。

DER 编码 或 Base 64 编码

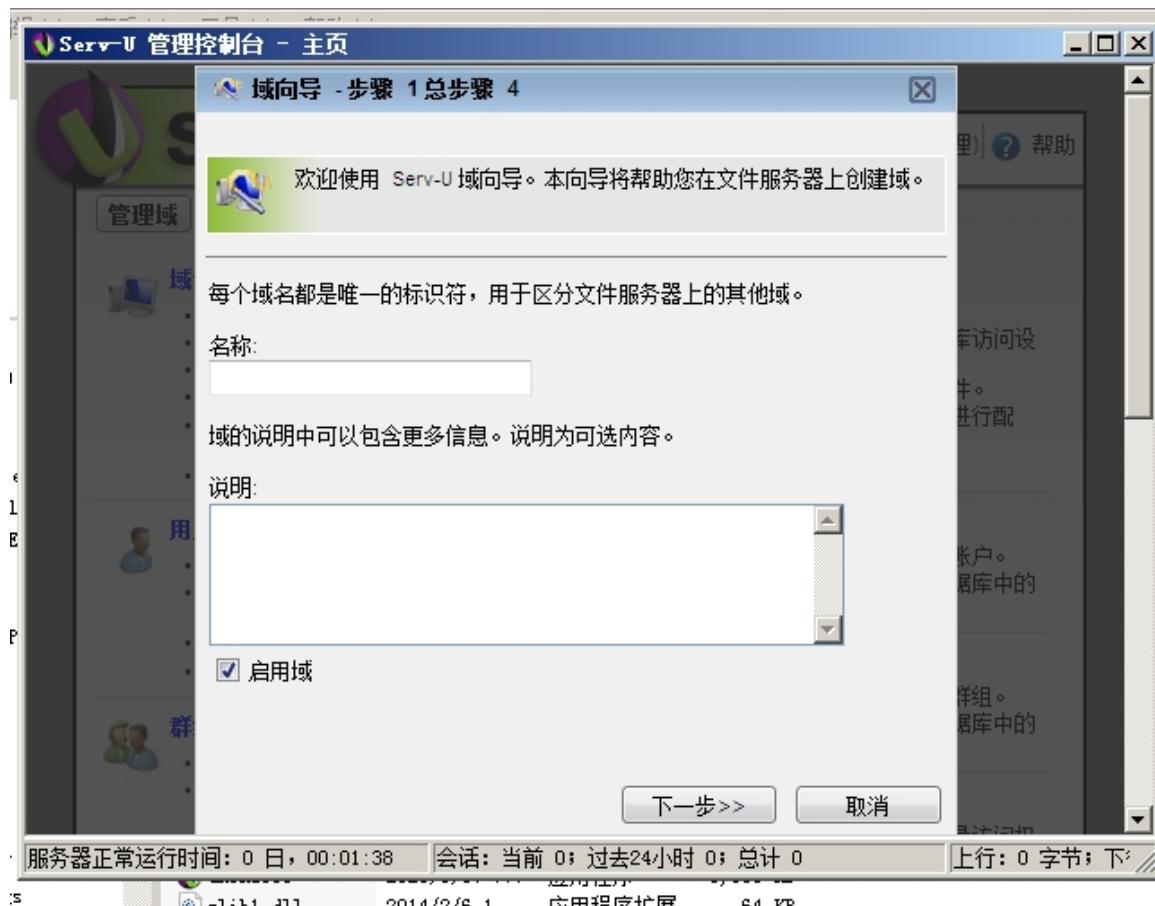
 [下载证书](#)
 [下载证书链](#)

The screenshot shows a Microsoft Internet Explorer window with the title "Microsoft Active Directory 证书服务 - Windows Internet Explorer". The address bar shows the URL "http://www.hsunion.com/certsrv/certcarr.asp". The page content includes a warning message: "Internet Explorer 已经阻止此站点以不安全的方式使用 ActiveX 控件。因此，此页可能显示不正确。" (Internet Explorer has blocked this site from using ActiveX controls in an unsafe way. Therefore, this page may not display correctly.). Below the message, there's a section titled "若要信任从该证书颁发机构颁发的证书，请安装此 CA 证书链。" (To trust certificates issued by this certificate authority, install this CA certificate chain.) and another section titled "要下载一个 CA 证书、证书链或 CRL，选择证书和编码方法。" (To download a CA certificate, certificate chain, or CRL, choose the certificate and encoding method.). There are fields for "CA 证书:" (CA Certificate:) containing "当前 [WIN-F33K8475ETA-CA]" and "编码方法:" (Encoding Method:) with radio buttons for "DER" (selected) and "Base 64". At the bottom, there are two links: "下载 CA 证书" (Download CA Certificate) and "下载 CA 证书链" (Download CA Certificate Chain).

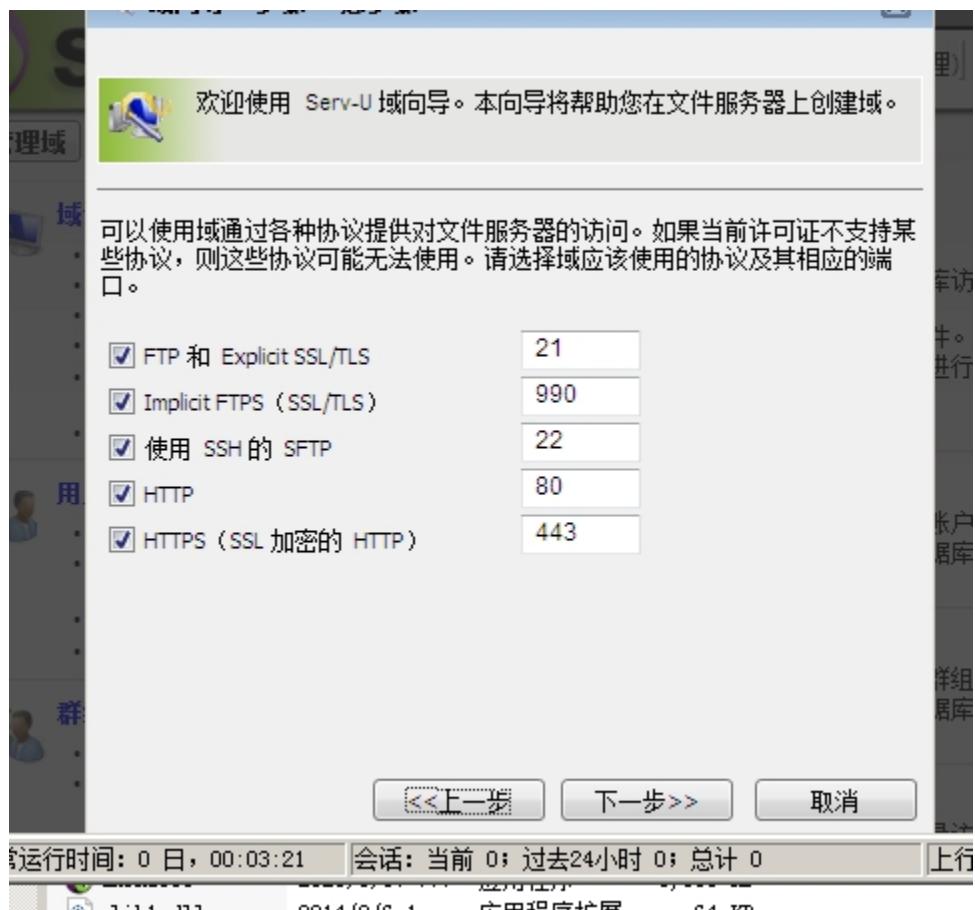
(7) 搜索引擎服务器

(8) FTP 服务器

安装并启动



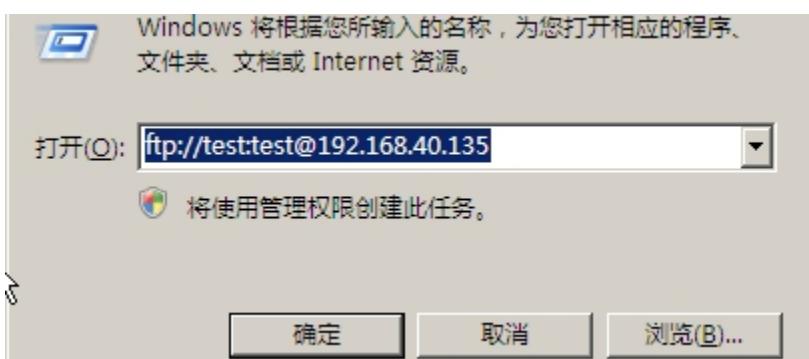
新建域

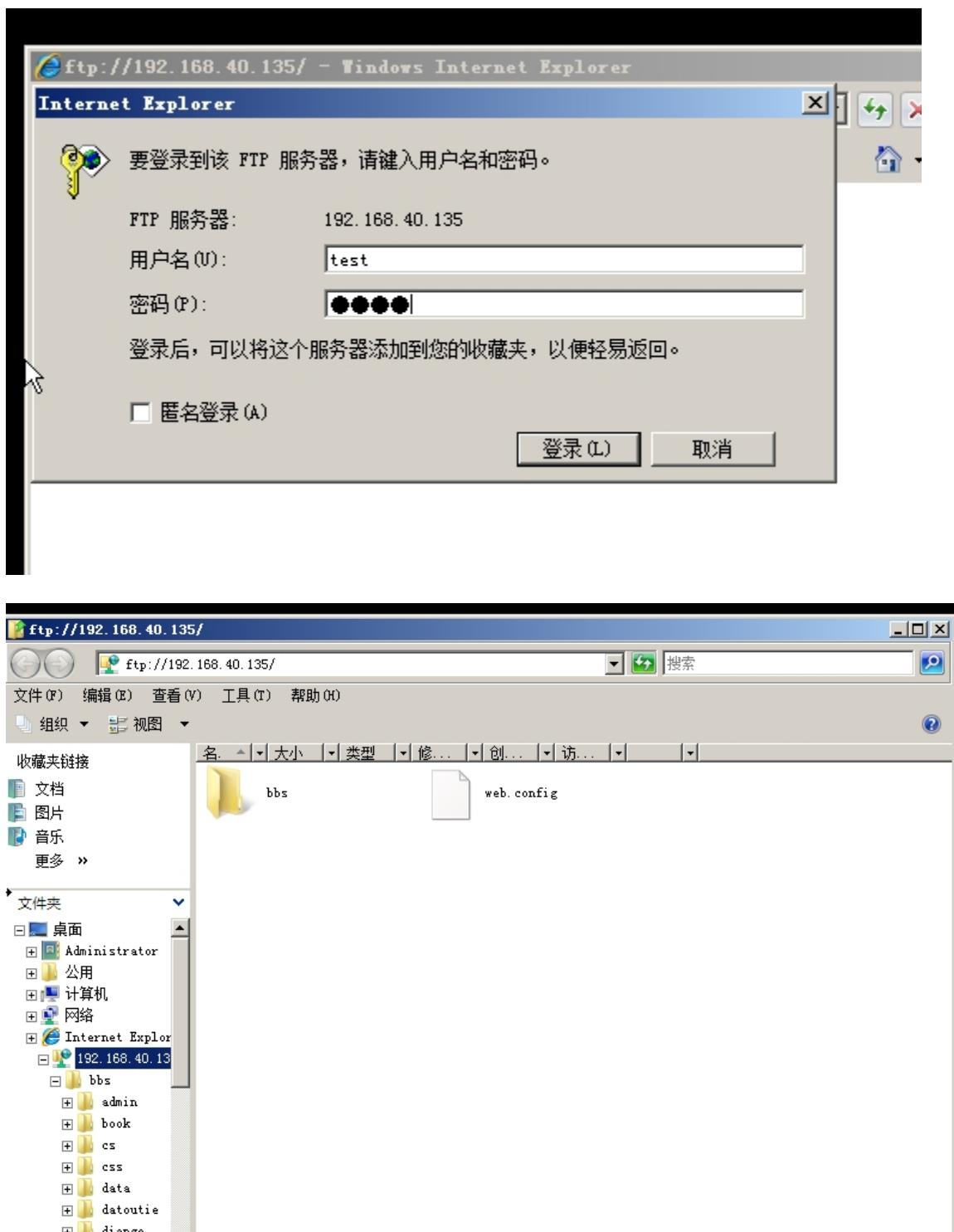


添加账号

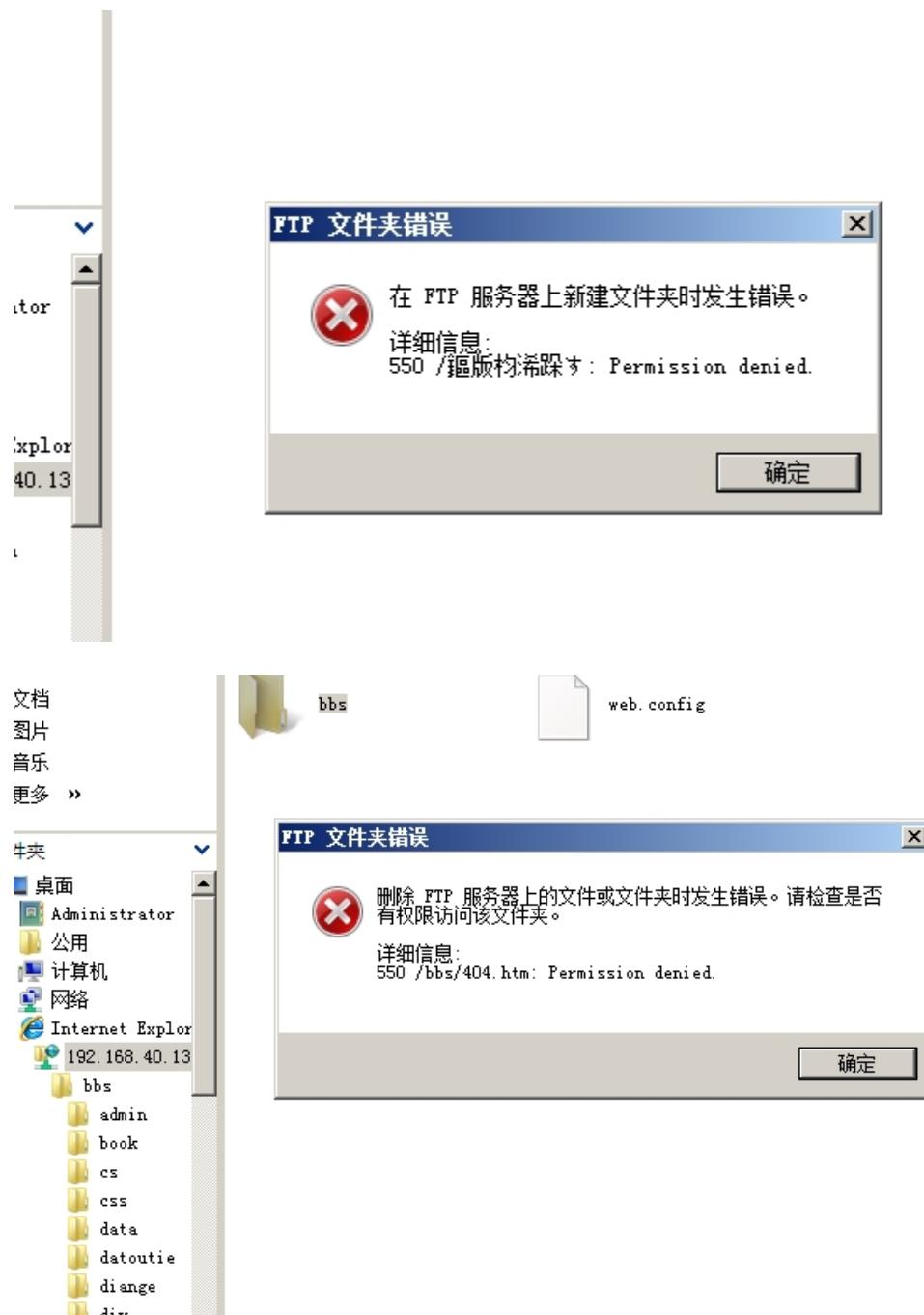


测试站点





测试权限

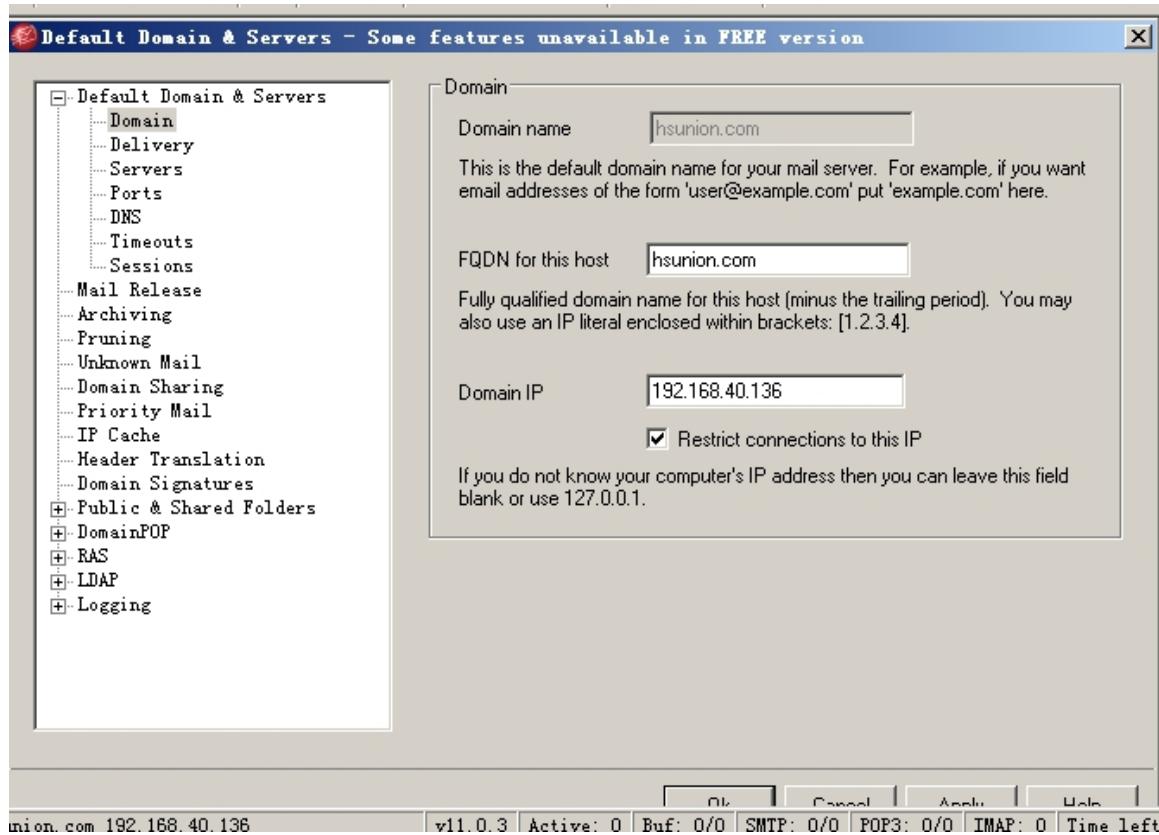


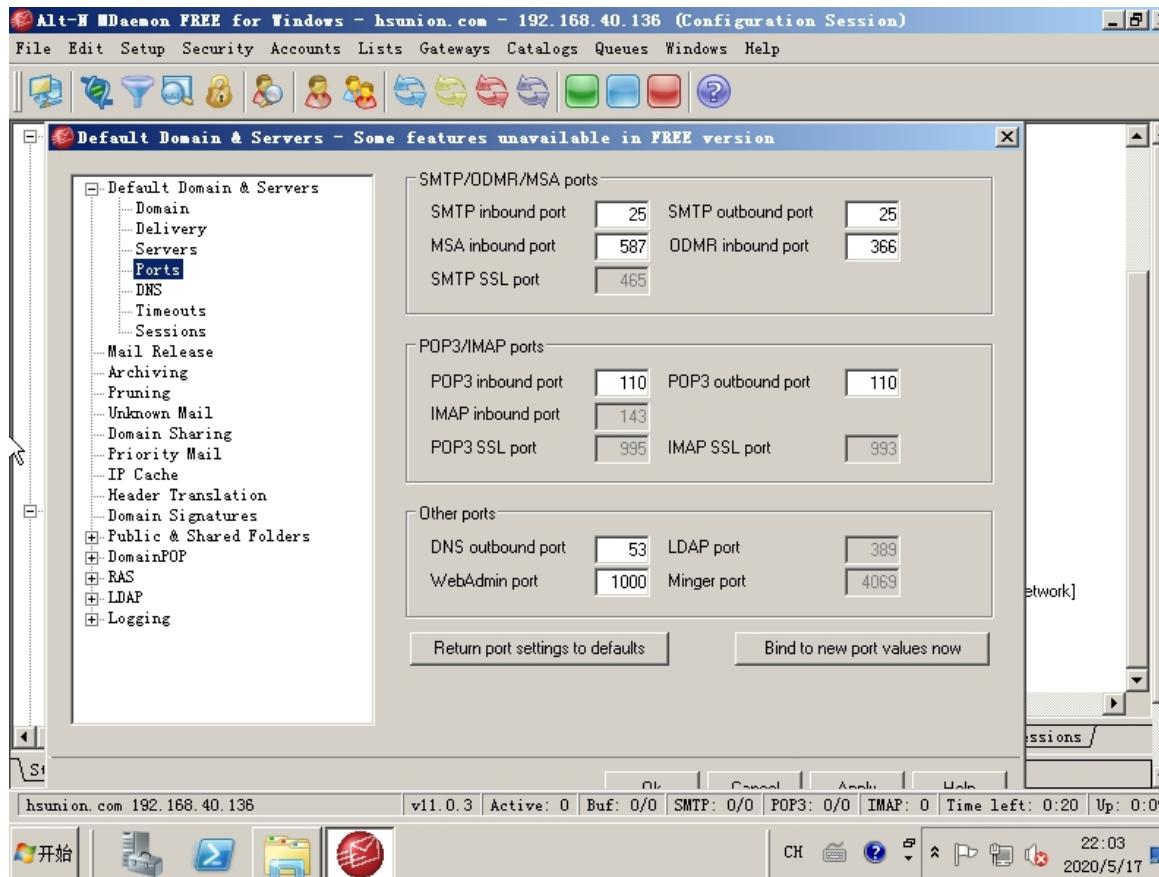
(9) SMTP 和 POP 服务器

安装启动并配置 MDaemon

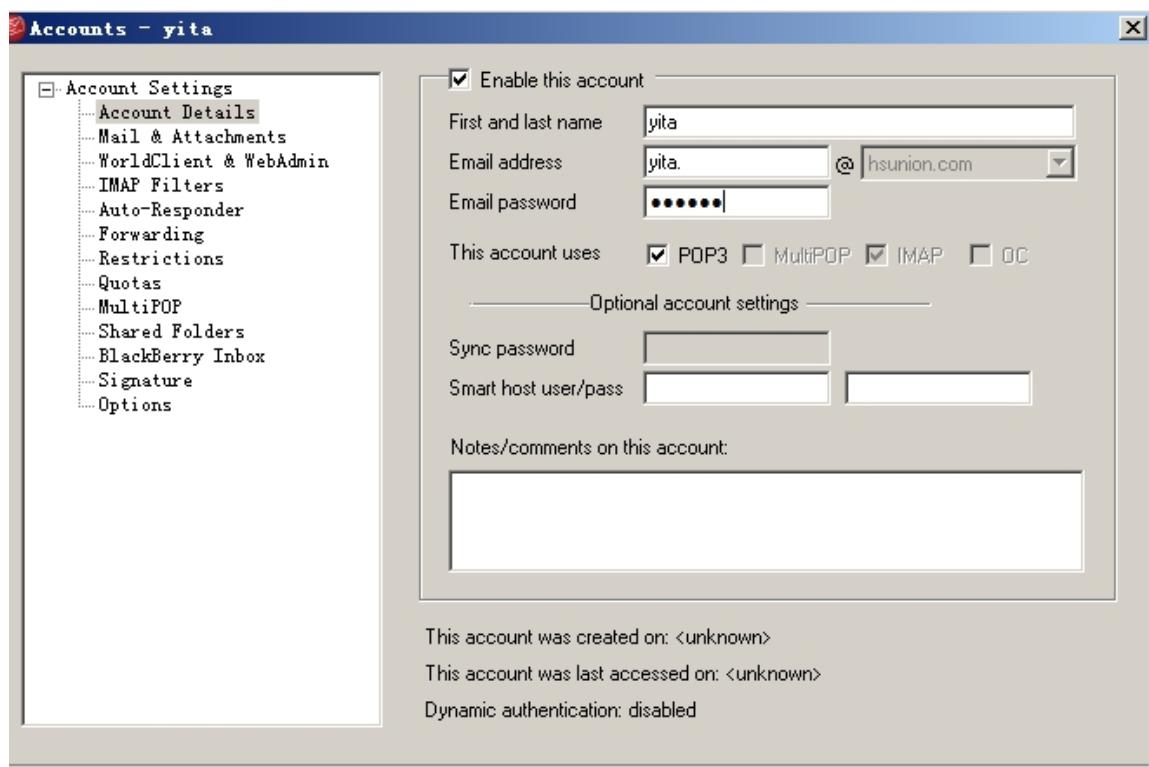


设置 IP 和端口号



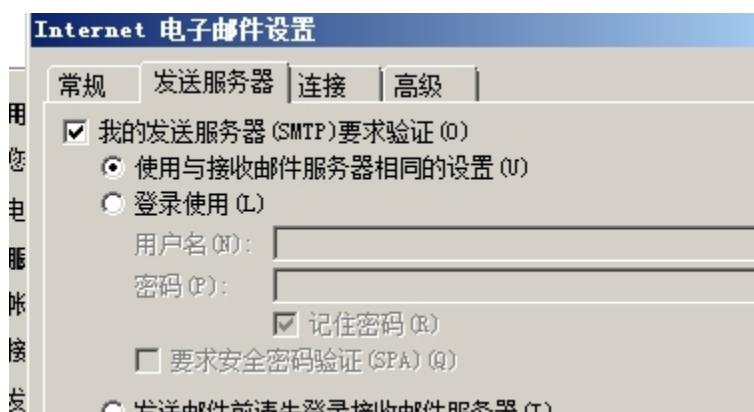


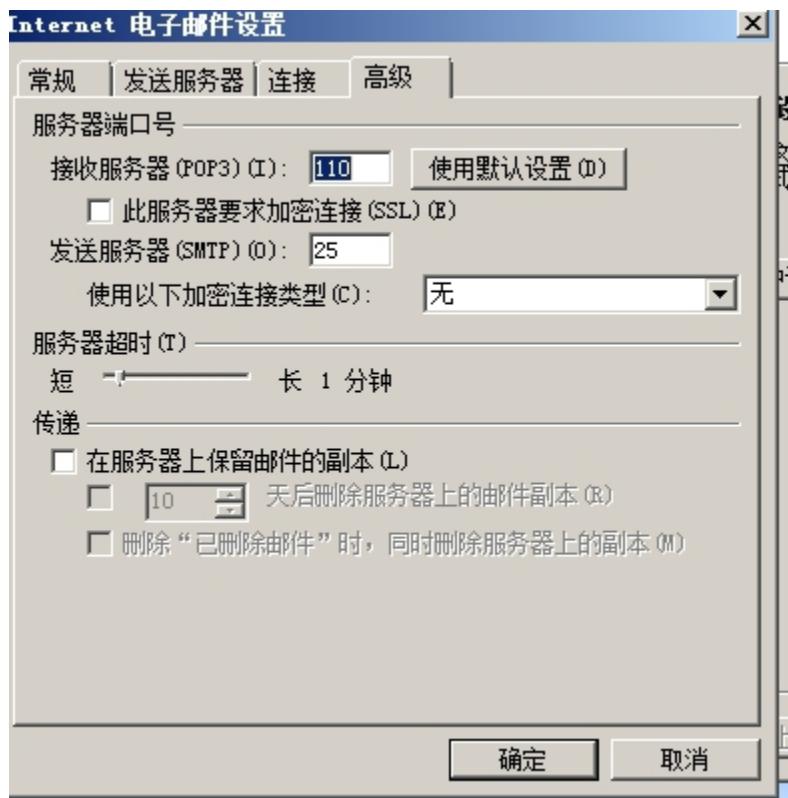
创建账号



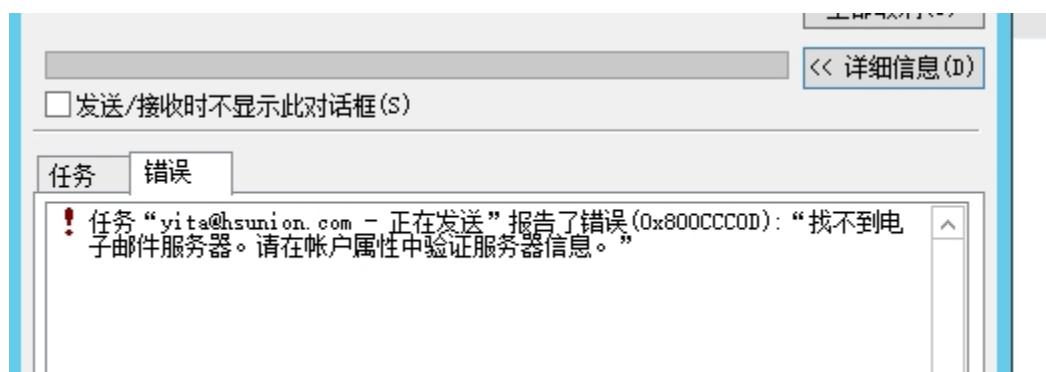
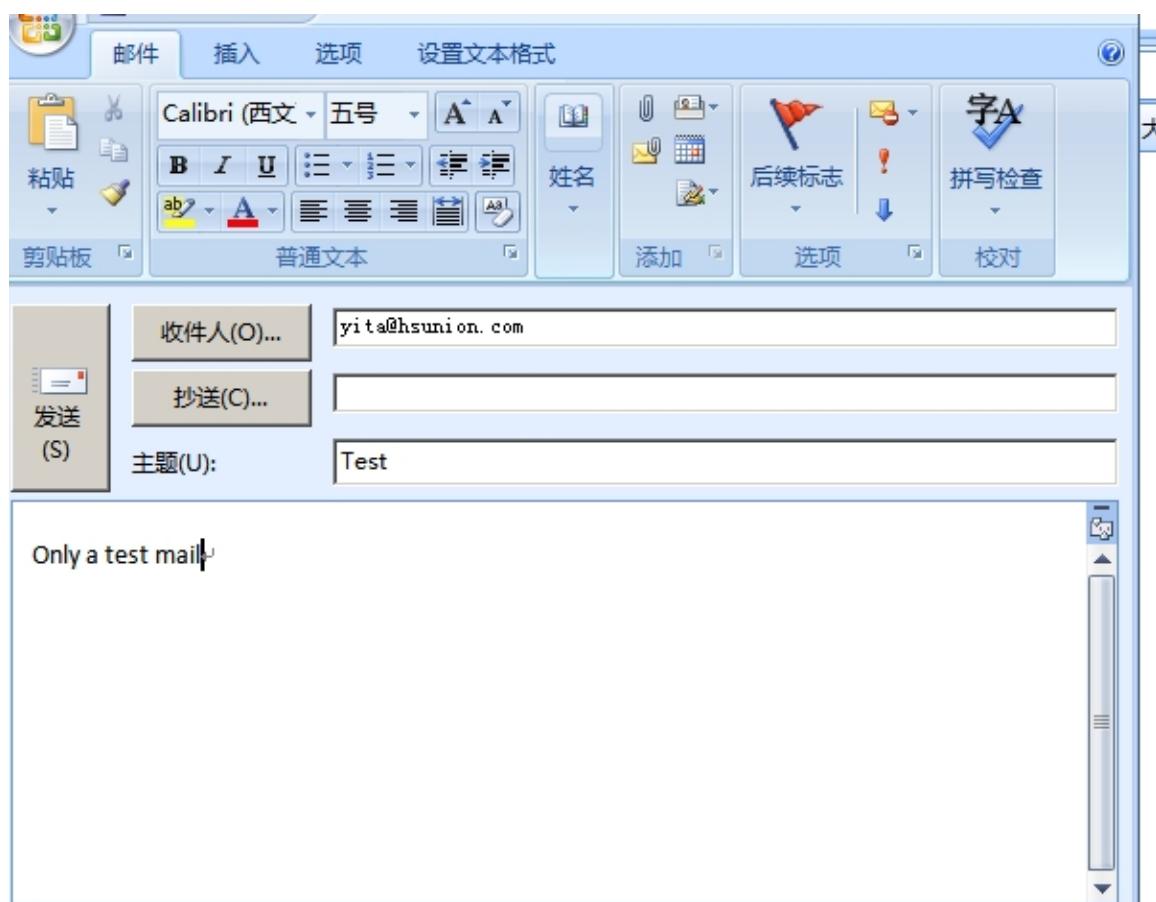
配置客户端







测试邮件是否能发送、配置是否正确



失败了...不知道哪里的配置出错（怀疑）



服务器已经启动了，但是 outlook 仍旧找不到服务器

4 实验总结

查询资料并按照手册内容，完成了 DNS、Web、FTP 和 SMTP 等应用层协议服务的安装和配置。过程一开始使用 Windows Server 2008，中途发现操作不便且有些软件不支持该版本，后来改用 Windows Server 2008 SP2，最终一起完成各服务搭建。