



## ZENworks Mobile Management 3

**Oliver vorm Walde**

Senior Sales Engineer  
EMEA Solution Consulting  
[ovwalde@novell.com](mailto:ovwalde@novell.com)



# Mobile Device Platform Support



Windows Mobile



Samsung Knox



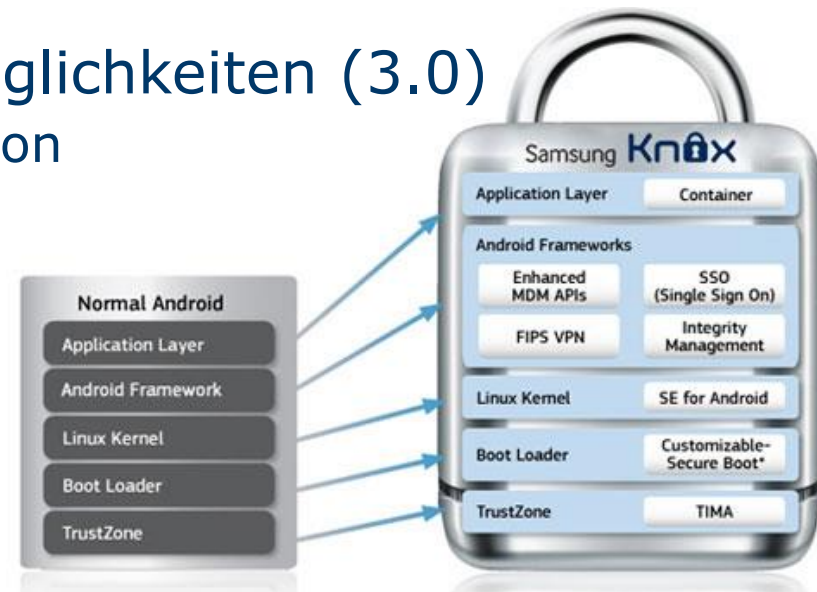
Windows phone



BlackBerry™

# ZMM Samsung KNOX Möglichkeiten

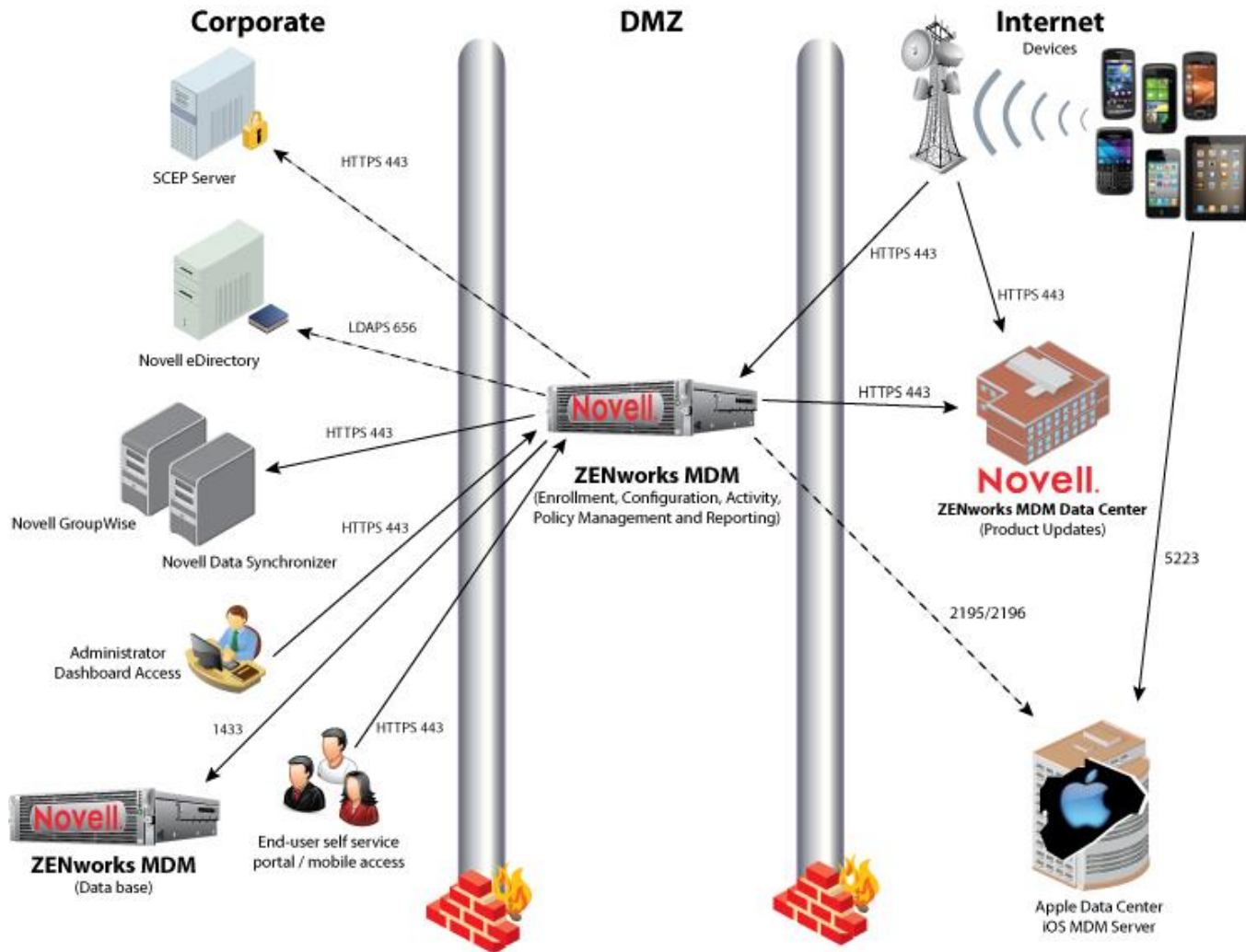
- Samsung KNOX EMM Capabilities (3.0)
  - Geräteinformationen (Bluetooth, Geräteiname, MAC Adresse, Gerätetyp und weiteres)
  - Erweiterte Passwortregeln
  - KNOX Regeln für die Einschränkung von Funktionen
  - Email Provisionierung mit Samsung eMail Client
  
- Samsung KNOX Workspace Möglichkeiten (3.0)
  - Provisionierung und Sicherung von KNOX Workspace Container
  - eMail Client im Container provisionieren
  - Benötigt eine Samsung KNOX Workspace Lizenz



## Filr + ZMM ... Zusammen besser

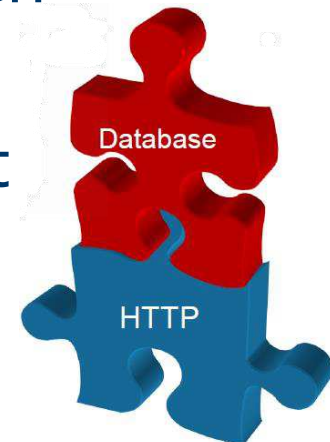
- Novell Filr ermöglicht Anwendern Zugriff auf seine Dateien, egal, wo er sich befindet oder mit welchem Gerät er zugreifen möchte
  - Zugriff auf den eigenen, persönlichen Speicher oder Heimverzeichnis von einem iOS, Android, Windows oder Mac Gerät
  - Ansicht der Dateien auf mobilen Geräten
- ZENworks Mobile Management >2.9 kann der Filr Agenten einfach für den Roll-Out konfigurieren und Daten absichern
  - Voreinstellung Bearbeiten/Kopieren/Einfügen und welche Anwendungen von Dateien geöffnet werden können

# ZENworks On-Premise Architektur



# System Architektur

- ZMM besteht aus zwei Hauptkomponenten
  - Web Server
    - Muß derzeit Internet Information Services (IIS) sein
  - Datenbank Server
    - Muß derzeit Microsoft SQL Server sein
- Beide Komponenten können auf einem Server arbeiten oder können aufgeteilt werden
- SSL Nutzung ist erforderlich
- DNS Namensauflösung wird bevorzugt gegen nur IP Adressnutzung



# System Anforderungen

## Datenbank Anforderungen

- Windows Server 2012
- Windows Server 2008 R2 (sp1 & sp2)
- Windows Server 2003 R2 x64 or Windows Server 2003
- Microsoft SQL Server 2012
- Microsoft SQL Server, 2008 R2 SP1 (*Standard Edition*)
- Microsoft SQL Server, 2008 R2 (*Standard Edition*)
- Microsoft SQL Server, 2008 SP3 (*Standard Edition*)
- Microsoft SQL Server, 2008 SP1 (*Standard Edition*)
- Microsoft SQL 2008 Web Edition oder
- *Microsoft SQL Express, 2008 (Unterstützt für Produkttests; Nicht empfohlen für die Produktion)*



# Web Server Anforderungen

- Windows Server 2012
- Windows Server 2008 R2 SP1, Windows Server 2008 mit SP2
- Windows Server 2003 R2 x64 oder Windows Server 2003
- Nutzen Sie die englischen Versionen. Installieren sie alle *Windows Server Updates*.



# Mobile Device Management Drivers

Security Management

Application  
Management\*

Policy Management

Inventory  
Management

Compliance Management

für



Smartphones



Tablets



Specialty Handhelds

Wie können Mobile Endgeräte  
implementiert werden?

# Vorbereitung

## Administrator

- Implementieren Sie ZENworks 2016
- Melden Sie sich zu VPP an.

## Benutzer

- Packen Sie das Gerät aus und aktivieren Sie es.
- Erstellen Sie gegebenenfalls eine Apple-ID sowie Accounts für den iTunes Store und für iCloud.

[https://www.apple.com/de/education/docs/EDU\\_Deployment\\_Overview.pdf](https://www.apple.com/de/education/docs/EDU_Deployment_Overview.pdf)

# Einrichten und Konfigurieren

## Administrator

- Melden Sie die Geräte per Self-Service an.
- Konfigurieren Sie Accounts, Einstellungen und Einschränkungen drahtlos über ZENworks 2016 anhand der Benutzer-/Gruppenrichtlinien, die von Ihrer Institution definiert wurden.

## Benutzer

- Personalisieren Sie das Gerät mit dem Systemassistenten und geben Sie (optional) eine persönliche Apple ID ein.
- Registrieren Sie sich bei ZENworks 2016.

# Anwendungen verteilen

## Administrator

- Kaufen Sie Apps mit VPP und weisen Sie sie den Benutzern mit ZENworks 2016 zu.
- Versenden Sie eine VPP Einladung an die Benutzer.
- Installieren Sie Caching Server, um die Bereitstellung von Inhalten über das lokale Netzwerk zu beschleunigen.

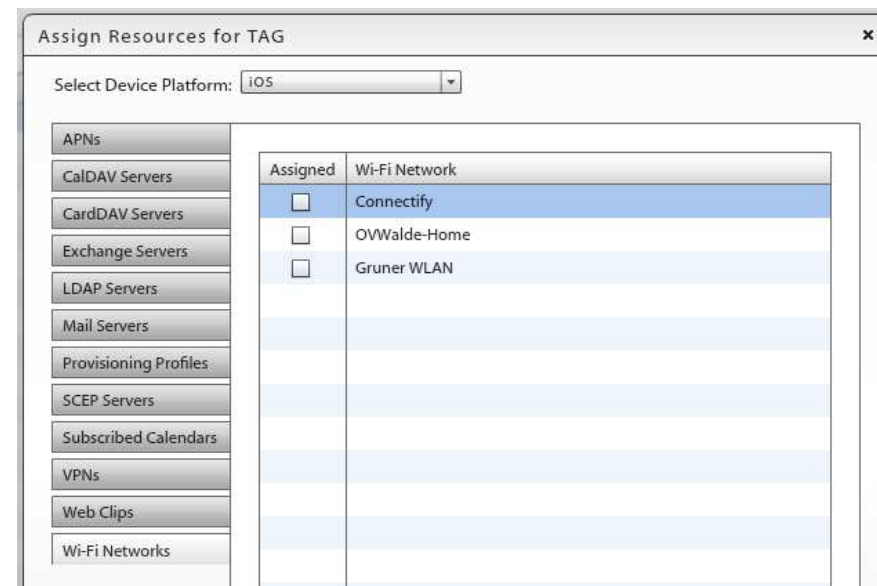
## Benutzer

- Nehmen Sie die Einladung zum VPP an.
- Laden und installieren Sie die Apps, die Ihnen von der Einrichtung zugewiesen wurden.
- Aktualisieren Sie iOS und Apps auf dem Gerät.

In Blick in die Kulissen

# ActiveSync und LDAP Provisionierung

- Ermöglicht Accounts via ActiveSync und/oder LDAP zu erstellen
  - Anwender kommen aus dem Verzeichnisdienst
- Steuerung über Gruppen
  - Nur dann können Nutzer Zugriff bekommen
- Zuweisen von Ressourcen
  - Access Points, CalDAV, Exchange etc.
  - Für iOS und Android unterschiedlich





Organization Management

- Usenovell
  - Server Settings
  - Domain Settings
  - Hands-Off Enrollment Settings
  - Group and Folder Configurations**
  - Periodic Update Settings

## Group and Folder Configurations

Configure groups and folders with Policy Suite, Device Connection Schedule, and Liability assignment.

A user's individual settings are determined first by any direct user assignments, then by any assignments made to the user's highest prioritized group, and finally by any assignments made to the user's folder. Organization defaults are applied if none of these have associated assignments.

- Groups**
- Folders

Select a group to make or edit Policy Suite, Connection Schedule, or Liability assignments. Click to Adjust priority button to change group priorities. Priorities determines settings when a user belongs to more than one group.

Priority	Imported LDAP Groups	Policy Suite	Connection Schedule	Liability
1	Mobile	BMG-Default	BMG-Default	Corporate

▲  
▲  
▼  
▼

Priority

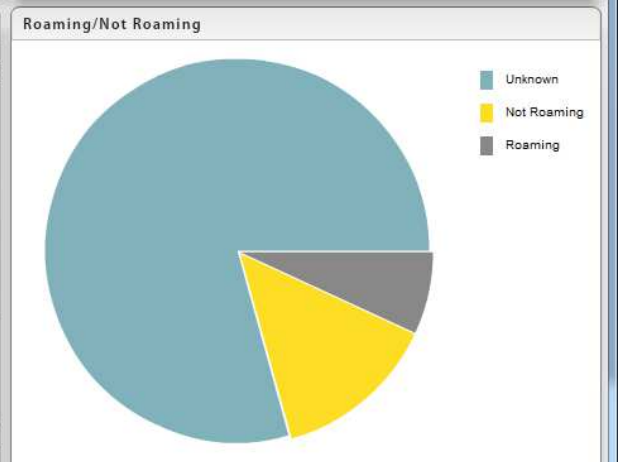
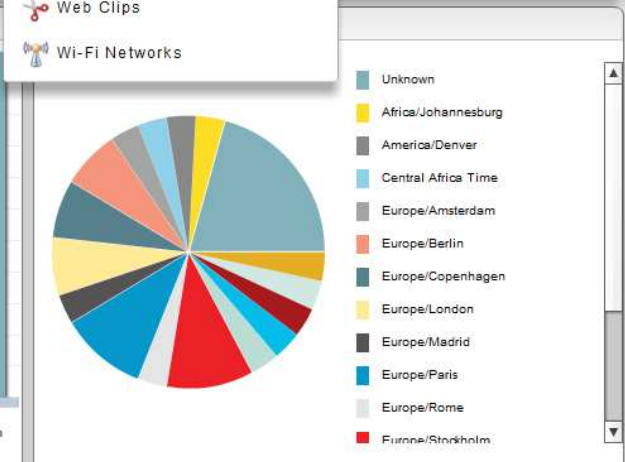
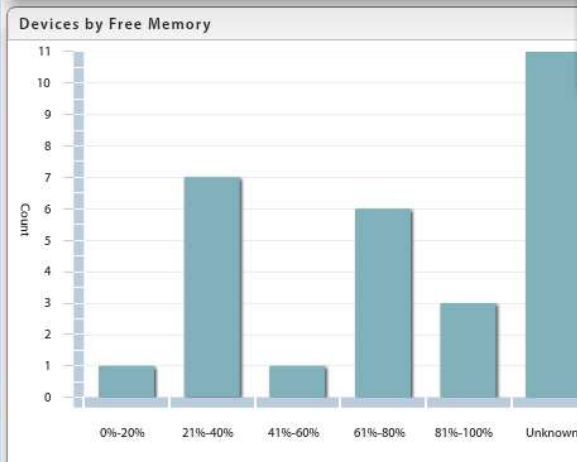
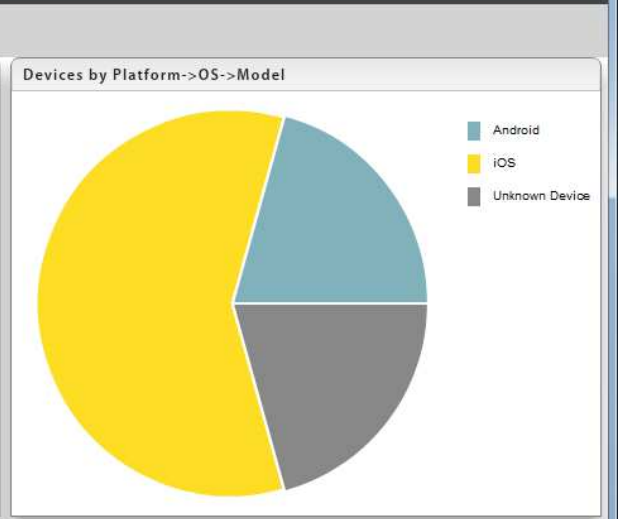
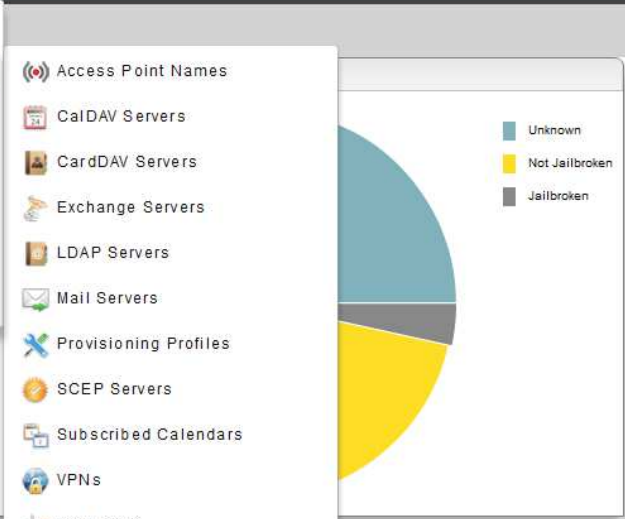
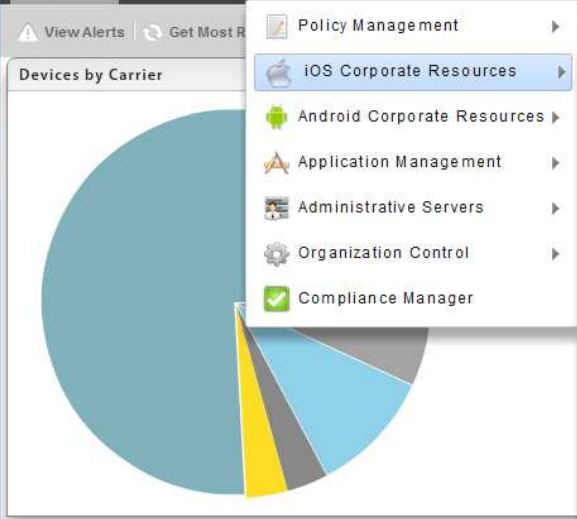
Import/Prioritize Groups

Group Name: Mobile

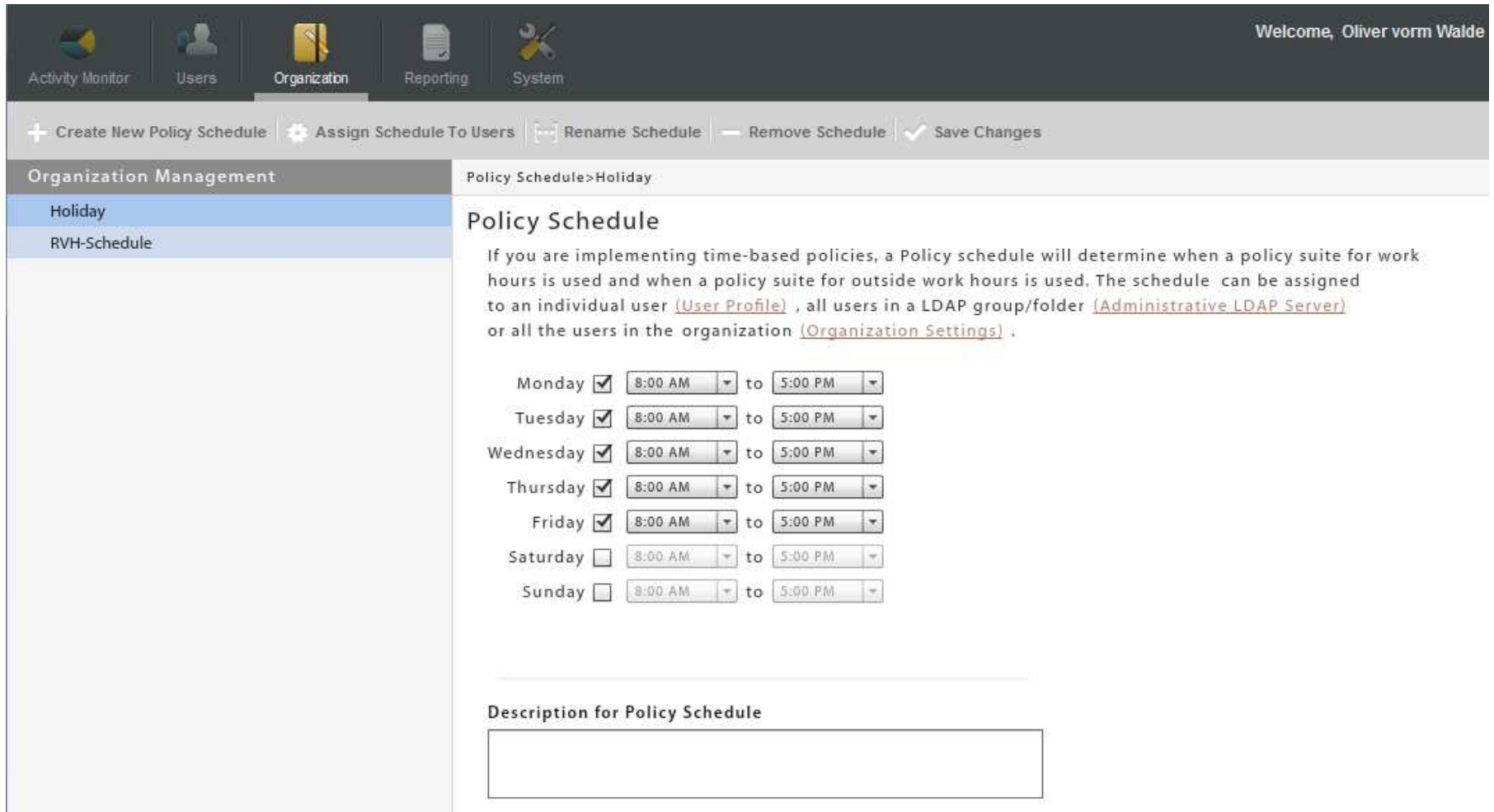
Policy Suite:

Connection Schedule:

Liability:  Unknown  Corporate  Individual



# Richtlinien zeitlich einstellbar



The screenshot shows the Micro Focus Administration console interface. At the top right, it says "Welcome, Oliver vorm Walde". The navigation bar includes "Activity Monitor", "Users", "Organization" (selected), "Reporting", and "System". Below the navigation bar, there are action buttons: "+ Create New Policy Schedule", "Assign Schedule To Users", "Rename Schedule", "Remove Schedule", and "Save Changes".

The main content area is titled "Policy Schedule > Holiday". On the left, there is a sidebar with "Organization Management" and a list of "Holiday" and "RVH-Schedule".

The "Policy Schedule" section contains the following text: "If you are implementing time-based policies, a Policy schedule will determine when a policy suite for work hours is used and when a policy suite for outside work hours is used. The schedule can be assigned to an individual user ([User Profile](#)), all users in a LDAP group/folder ([Administrative LDAP Server](#)) or all the users in the organization ([Organization Settings](#))." Below this text is a table for configuring the schedule by day:

Day	Start	End
Monday	8:00 AM	5:00 PM
Tuesday	8:00 AM	5:00 PM
Wednesday	8:00 AM	5:00 PM
Thursday	8:00 AM	5:00 PM
Friday	8:00 AM	5:00 PM
Saturday	8:00 AM	5:00 PM
Sunday	8:00 AM	5:00 PM

Below the table, there is a section for "Description for Policy Schedule" with a text input field.

# The Grid



Search

LDAP Folders

User Panel

- Last Sync:
- Device Platform: iOS 
- Ownership: Company
- Phone Number: Unknown
- Location: [See Most Recent Location](#)
- Messaging: [E-mail User](#)
- Device Reporting: [View Device Report](#)
- Device Compliance: [Clear ZENworks Authorization Failures](#)  
[Clear ActiveSync Authorization Failures](#)  
[Clear SIM Card Removed or Changed Violation](#)  
[View Device Violation Details](#)
- Administration: [Clear Device Enrollment](#)  
[Clear Passcode](#)  
[Disable Device](#)  
[Full Wipe](#)  
[Lock Device](#)  
[Selective Wipe](#)  
[Send Welcome Letter](#)

Active	User Name	First Name	Last Name	Domain	Liability	Ownership	Last ZENworks Sync (Server Local)	Last ActiveSync Sy
Yes	KHild	Klaus	Hild	emea.novell.cor	Individual	Company		
Yes	owwalde	Oliver	vorm Walde	emea.novell.cor	Corporate	Company	03/23/2013 8:17 AM (-06:00 GMT)	03/25/2013 7:54 AM (-06:00 GMT)
Yes	owwalde	Oliver	vorm Walde	emea.novell.cor	Individual	Company	03/25/2013 7:57 AM (-06:00 GMT)	03/15/2013 5:23 AM (-06:00 GMT)
Yes	owwalde	Oliver	vorm Walde	emea.novell.cor	Individual	Personal	03/15/2013 9:52 AM (-06:00 GMT)	03/20/2013 4:55 AM (-06:00 GMT)
Yes	test23	test	23		Corporate	Company		
Yes	tsens	thomas	Sens	emea.novell.cor	Corporate	Company	03/22/2013 6:00 PM (-06:00 GMT)	02/12/2013 8:44 AM (-06:00 GMT)
Yes	tsens	thomas	Sens	emea.novell.cor	Corporate	Personal	03/06/2013 4:17 AM (-06:00 GMT)	12/12/2012 5:06 AM (-06:00 GMT)
Yes	tsens@novell.co			emea.novell.cor	Corporate	Company	10/04/2012 1:54 AM (-06:00 GMT)	

## ovwalde

## User Information

## Devices (3)

## iPad 2

## Administration

## Corporate Resources

## GT-I9100

## GT-P6210

## All Devices Summary

## DEVICE INFORMATION

CONFIGURATION

SECURITY

LOCATION

PHONE CALLS

TEXTS

LOGS

FILE LIST

APPS

## Status

## Last Connections

Device App: 03/23/2013 8:17 AM (-06:00 GMT)  
 ActiveSync: 03/25/2013 7:45 AM (-06:00 GMT)  
 iOS APN Sent: 03/25/2013 7:44 AM (-06:00 GMT)  
 iOS APN Check-In: 03/25/2013 7:44 AM (-06:00 GMT)

## Battery

Level: 94%  
 Status: Unplugged  
 Last Boot Time: 03/18/2013 12:09 PM (+01:00 GMT)

## Encryption

Device Encrypted: N/A  
 Storage Card Encrypted: N/A

## Device Memory

Capacity: 13.81 GB  
 Available: 1.56 GB  
 Percent Free: 11%

## External Storage Card

Capacity: N/A  
 Available: N/A  
 Percent Free: N/A

## Jailbroken

Jailbroken: No

## TouchDown

TouchDown Registered: N/A

## Roaming

Currently Roaming: N/A  
 Voice Roaming Enabled: N/A  
 Data Roaming Enabled: Yes

## About

## Device Application

Version: 2.7.0.3  
 Language: Englisch (Vereinigte Staaten)

## ActiveSync

Version: 2.5  
 User Agent: Apple-iPad2C2/1002.146

## Operating System

Language: Englisch (Vereinigte Staaten)  
 Version: 6.1.2

## Device

Model: MC982FD  
 Model Name: iPad  
 Device Name: iPad von ovwalde  
 Ownership: Company  
 Platform: iOS  
 UID: 11cee7916351e7101e73c2c85ed87efd7d70070f  
 IMEI: 01 292800 437300 5  
 Phone Number:  
 Timezone: Europe/Berlin  
 GMT Offset: 01:00  
 Build Version: 10B146  
 Product Name: iPad2,2  
 Serial Number: DN6H7G7DDKNV  
 Modem Firmware Version: 04.12.05  
 MEID: N/A  
 ICCID: 8949 2014 1260 1018 5882  
 Bluetooth MAC: 1c:ab:a7:19:55:33  
 Wi-Fi MAC: 1c:ab:a7:19:55:34  
 Subscriber MCC: 262  
 Subscriber MNC: 02  
 Carrier MNC: 000



ovwalde

- User Information
- Devices (3)
  - iPad 2
- Administration
- Corporate Resources
  - GT-I9100
    - GT-P6210
  - All Devices Summary

[DEVICE INFORMATION](#) | 
 [CONFIGURATION](#) | 
 [SECURITY](#) | 
 [LOCATION](#) | 
 [PHONE CALLS](#) | 
 [TEXTS](#) | 
 [LOGS](#) | 
 [FILE LIST](#) | 
 [APPS](#)

### Available Security Commands

- Send Welcome Letter
Re-send the welcome letter to the user.
- Clear Device Enrollment
Clears the enrollment data of a device and allows the user to enroll another device.
- Disable Device

Disables or enables device connection with the ZENworks Mobile Management server.

Enabled on 02/20/2013  
8:03 AM (-06:00 GMT)
- Lock Device
Remotely locks the device, requiring an unlock password to be entered before the device can be used.
- Clear Passcode
The passcode is cleared. If the user's policy enforces the use of a passcode, a prompt to create a new one will appear on the device.
- Selective Wipe
Removes all email and PIM data controlled by ZENworks Mobile Management. Though the command is immediately pushed, the device has the ability to postpone this action for a short period of time.
- Full Wipe
The device is restored to a factory state. This includes the deletion of all applications and user data from the device.
- Trigger APN
Immediately sends an APN to the device causing it to check the server and retrieve any pending commands. This can be used to remedy a situation in which Apple Push Notifications are not synchronizing.

# Self Service Portal lokalisiert

Willkommen. **ovwalde**
Logout

**Wählen Sie Ihr Gerät**

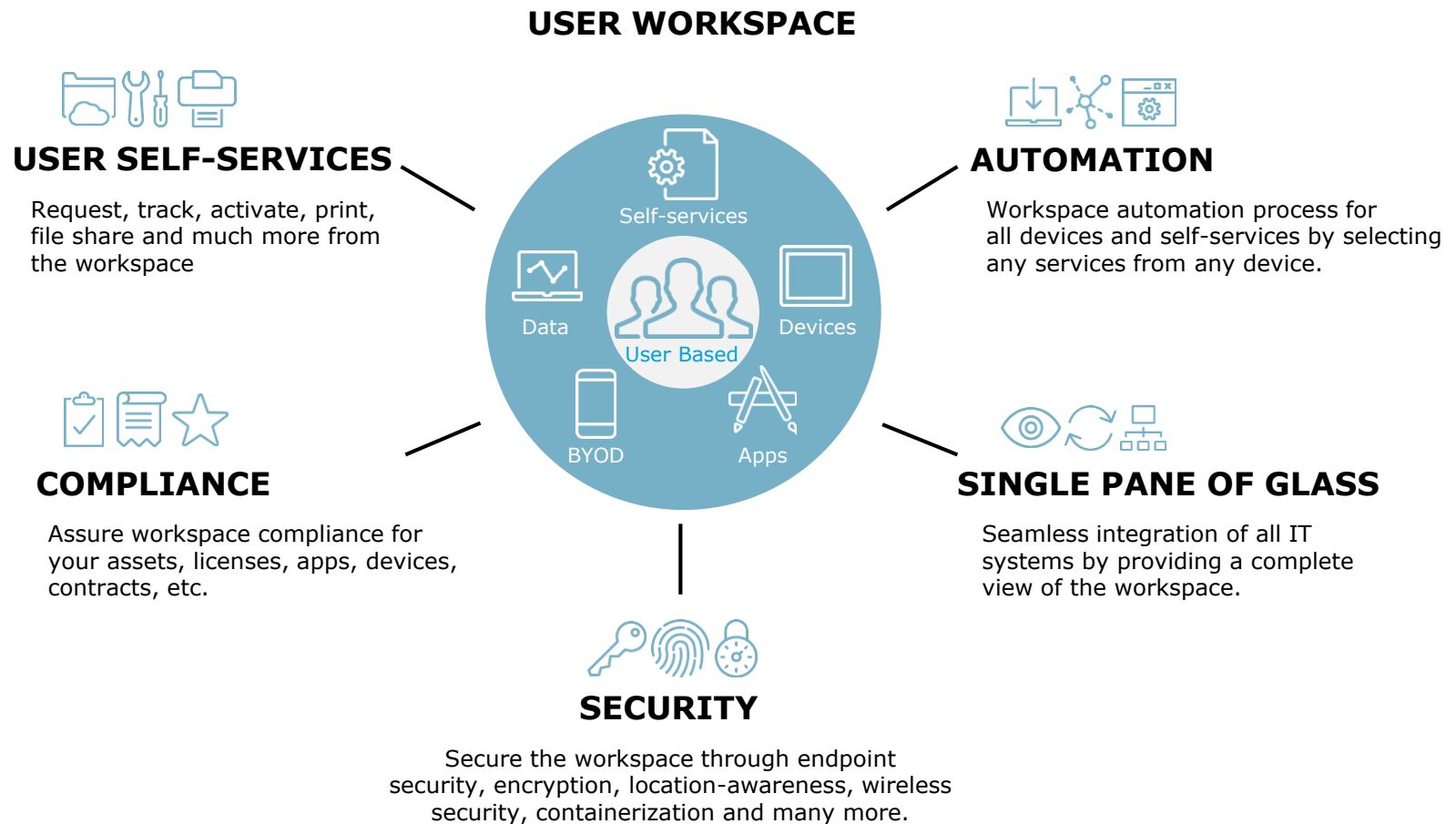
- GT-I9195
- VMware Virtual Platf...
- GT-P6210
- iPad von **ovwalde**

Zertifikat verwalten	APPLIKATIONEN
Verwaltung des Geräts beenden	Gerät orten    Gerät sperren    Vollständig dauerhaft löschen    Passcode löschen
<p>Mobile Geräte speichern oftmals vertrauliche Daten über den Gerätebenutzer und die Betriebsmittel des Arbeitgebers sowie vertrauliche Unternehmensdaten. Selective Wipe entfernt E-Mail/PIM, die mit der E-Mail-Anwendung auf dem Gerät assoziiert sind, löscht das ZENworks-Konto und löscht das Gerät vom Server. Die Speicherkarte wird nicht gelöscht. Auf iOS-Geräten werden verwaltete iOS-Apps und Profile ebenfalls entfernt. E-Mail/PIM können auf Androids mit der nativen E-Mail-Anwendung oder auf Geräten ohne die ZENworks-App nicht gelöscht werden. .</p> <p style="background-color: #ffff00; padding: 5px;">Sollten sich auf der Speicherkarte auch sensible Daten befinden, diese zuerst dauerhaft löschen, da sie nicht dauerhaft gelöscht werden kann, nachdem das Gerät nicht mehr verwaltet wird. Speicherkarte dauerhaft löschen verwenden.</p> <p style="text-align: center; margin-top: 20px;">Möchten Sie aufhören, Ihr <b>iPad von ovwalde</b> zu verwalten?</p> <p style="text-align: center; margin-top: 10px;"> <span style="background-color: #0070c0; color: white; padding: 10px 20px; border-radius: 15px; display: inline-block;">Verwaltung meines Geräts beenden ▶</span> </p>	



Was kommt mit ZENworks 2017?

# ZENworks - Enabling the Workspace



# Integriertes Mobile Management in ZENworks 2017

Novell. ZENworks. Zone: ZENUX-ONE

Welcome, administrator | Help | Logout

Home  
**Devices**  
 Users  
 Policies  
 Bundles  
 Patch Management  
 Deployment  
 Reports

Devices > Discovered > Apple DEP Devices

Disown Action View

<input type="checkbox"/>	Name	Device Model	Description	Color	Initial Discovery	MDM Server	Deployment Status
<input type="checkbox"/>	<a href="#">F4KMH8QKFCM5</a>	iPad Mini Wi-Fi with...	Description	Red	Mar 14, 2014 3:11 PM	<a href="#">zenux42.myco.com</a>	Discovered
<input type="checkbox"/>	<a href="#">G1QJJ3YUMBC9</a>	iPad Mini Wi-Fi with...	Description	Blue	Mar 14, 2014 3:11 PM	<a href="#">zenux56.myco.com</a>	Managed

1 - 2 of 2 show 25 items

Devices

New Edit Delete Action Quick Tasks

<input type="checkbox"/>	Status	Name	Type	Operating System	Last Contact	Retired
<input type="checkbox"/>		<a href="#">Android</a>	Dynamic Mobile Device Group			
<input type="checkbox"/>		<a href="#">iOS</a>	Dynamic Mobile Device Group			
<input type="checkbox"/>		<a href="#">Windows Phone</a>	Dynamic Mobile Device Group			

1 - 3 of 3 show 25 items

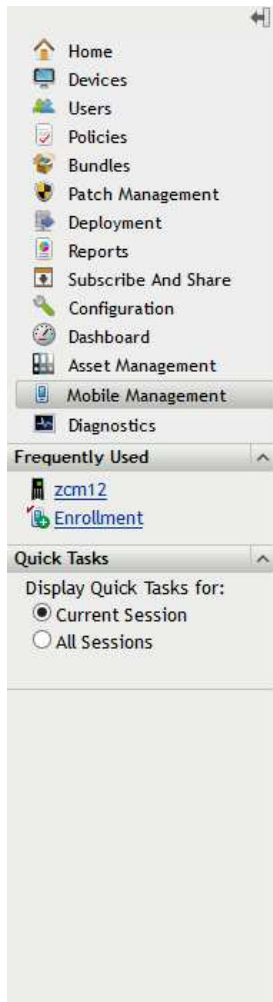
ActiveSync Servers

New Delete Action

<input type="checkbox"/>	Status	Name	Address	User Source
<input type="checkbox"/>		<a href="#">Corporate Mobility</a>	mobility1.novell.com	

1 - 1 of 1 show 5 items

# MDM Startbildschirm



## Getting started with Mobile Management

Before you can manage mobile device access to your organization's resources, you need to configure a few settings required for devices to enroll. You can then configure additional settings to provide email access and device management.

### Required Settings

To allow users to enroll devices, you must configure ZENworks with a user source and provide users with an enrollment policy.



#### User Sources

Ensure that ZENworks is connected to your organization's user source and that the user source is configured to support mobile device management. [Learn more...](#)

[User Sources](#)



#### Enrollment Policy

Create an enrollment policy and assign it to users. The policy determines who can enroll devices, what devices they can enroll, and the location and naming of the devices. [Learn more...](#)

[New Enrollment Policy](#)

[Assign Policy](#)

### Additional Settings

To allow email access to users, and to fully manage enrolled devices, there are additional features to configure.



#### Email

Create an ActiveSync server to manage access to GroupWise or Exchange email and link it to your user sources. [Learn more...](#)

[New ActiveSync Server](#)



#### Android Devices

Configure Google Cloud Messaging(GCM) to allow ZENworks to send push notifications to Android devices and communicate with the ZENworks agent installed on the device. [Learn more...](#)

[Configure GCM](#)



#### Apple Devices

Configure Apple Push Notification Services(APNs) to allow ZENworks to send push notifications to Apple devices and communicate with the ZENworks agent installed on the device. [Learn more...](#)

[Configure APNs](#)

### What's Next

Additional features can be configured to leverage the capabilities of a fully managed device.



#### Device Security and Control

Create policies to secure and control devices. [Learn more...](#)

[Create New Policies](#)

# Erstellen von APN Zertifikaten

**Apple Push Notification** ✕

Configure the Apple Push Notification Server certificate to manage iOS devices.

**Apple Push Notification Certificate** ^

An APNs certificate is required to allow ZENworks to communicate with the Apple Push Notification Service and your Apple devices. You must 1) create a Certificate Signing Request (CSR) that is signed by Novell, 2) submit the signed request to Apple to obtain an APNs certificate, and then 3) import the certificate from Apple.

**Create a Certificate Request...**

---

**Import APNS Certificate...**

Subject:  
Expiration:  
Key Length:

---

**Test Certificate**

---

**OK** **Apply**

**Create a Certificate Signing Request** ? ✕

**Certificate Details**

Enter the following information for the Certificate Signing Request. All fields are required.

Organization Apple ID:   
Must be a valid Apple ID in email format (ie apple@novell.com)

Organization Unit:

Organization Name:

City or Locality:

State:

Country:

Key Length:  ▾

**Novell Customer Center Credentials**

Enter your NCC credentials to submit the Certificate Signing Request to Novell.

Username:

Password:

After you have submitted the CSR, you will be prompted to save the certificate request file.

**Submit for Signing** **Cancel**

# Erstellen von Regeln ...

## Mobile Security

Displayed Version: Sandbox

Publish

Summary Relationships Details Requirements Settings Share Audit

### Password

### Encryption

### Device Inactivity

Select the password settings for this policy for all supported devices.

Corporate

Individual



	Corporate	Individual	Android	iOS	iOS	iOS
Require password	Yes	Yes	●	●	●	●
Allow simple password	No	Yes	●	●	●	●
Require minimum password length	Yes	Yes	●	●	●	●
Minimum password length	8	4	●	●	●	●
Require alphanumeric password	Yes	No	●	●	●	●
Minimum number of complex characters	2	1	●	●	●	●
Require device password expiration	Yes	No	●	●	●	●
Password expiration (days)	30	15	●	●	●	●
Require device password history	Yes	No				
Number of passwords stored	7	2				

 Skype

Displayed Version: Sandbox

Publish

Summary Relationships Settings Details

### Application Settings

Application URL in App Store: \*

Test URL

The path must be resolvable by the device on which the bundle is run.

- Prevent backup of app to iTunes
- Remove app if MDM Configuration profile is deleted

Fields marked with an asterisk are required.

Apply

Reset

# ... oder Bundles

- Wizard gesteuert und VPP gestützt































[Bundles](#) > [iOS](#) > [Create New Bundle](#)

**Create New Bundle**

**Step 3: Search iOS App**

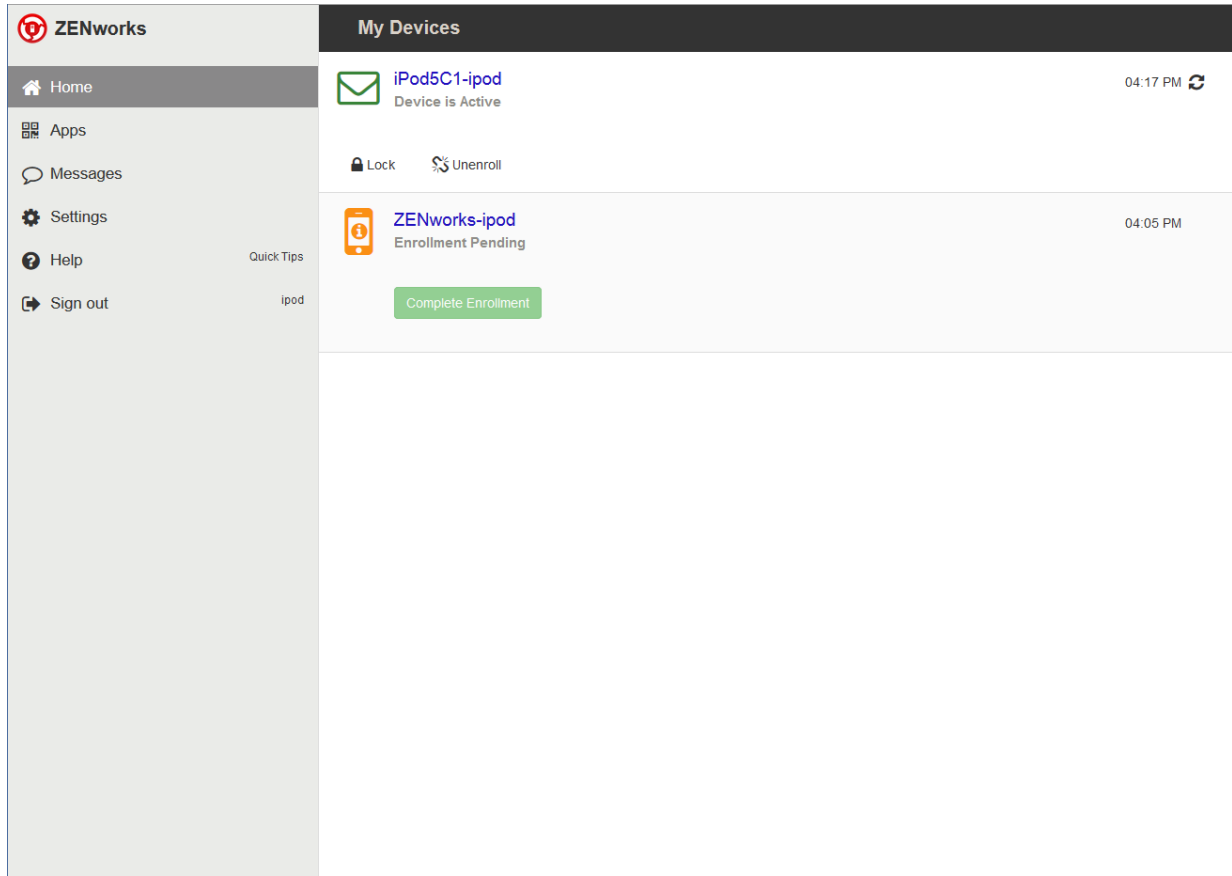
Search for:




Region:  Compatibility:

Name	Publisher	Cost	Size	Devices
 Abi-Lernbox - Die optimale Abiturvorbereitu...	Klett Lerntraining GmbH	Gratis	23.41 MB	 
 Blitzrechnen 1. Klasse - Mathe lernen in der ...	Ernst Klett Verlag GmbH	2,99 €	99.52 MB	 
 phase6 classic	phase-6 GmbH	Gratis	76.57 MB	 
 Deutsch - (Englisch/Türkisch/Russisch) - Vok...	Mobilinga GmbH	Gratis	84.44 MB	 
 PONS Vokabeltrainer	PONS GmbH	Gratis	12.1 MB	 
 Lesen und schreiben lernen mit der ZEBRA - ...	Ernst Klett Verlag GmbH	Gratis	56.99 MB	 
 Spanisch - Vokabeltrainer - Con gusto A1 - Er...	Mobilinga GmbH	4,99 €	70.07 MB	 
 Englisch - Vokabeltrainer - Fairvay A1 - Erns...	Mobilinga GmbH	4,99 €	60.55 MB	 
 Französisch - Vokabeltrainer - Voyages A1 - ...	Mobilinga GmbH	4,99 €	44.98 MB	 
 Italienisch - Vokabeltrainer - Con piacere A1...	Mobilinga GmbH	4,99 €	58.59 MB	 

1 - 10 of 47 items 10 | 25 | 50 | 100 | 400

# ZENworks End User Portal / Mobile App



ZENworks		My Devices	
Home		 iPod5C1-ipod	04:17 PM 
Apps		Device is Active	
Messages		<a href="#">Lock</a> <a href="#">Unenroll</a>	
Settings		 ZENworks-ipod	04:05 PM
Help	Quick Tips	Enrollment Pending	
Sign out	ipod	<a href="#">Complete Enrollment</a>	



Haben Sie Fragen



# Nächste Schritte



**Ansprechpartner**

Telefon / e-Mail



**Download**

[download.novell.com](https://download.novell.com)



**ZENworks® 11 Configuration Management**

<https://www.novell.com/products/zenworks/endpoint-management/>