

# NAGIOS CERTIFIED ADMINISTRATORTRAINING

Level - Advance

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TRAINING DATES	TDB
TIME   DAYS	5 DAYS
TRAINER NAME	RAJESH KUMAR
	HTTPS://WWW.RAJESHKUMAR.XYZ/CV/

## **ABOUT NAGIOS**

NAGIOS CORE IS THE FOUNDATIONAL APPLICATION THAT PROVIDES THE MONITORING AND ALERTING OPTIONS THAT NAGIOS IS KNOWN FOR. ADMINISTRATION OF THE NAGIOS INTERFACE IS MAINLY ACHIEVED THROUGH THE CLI OR COMMAND LINE INTERFACE. THE NAGIOS WEB INTERFACE WHICH USES CGI AS THE BACKEND BY DEFAULT CAN BE MODIFIED TO USE A MYSQL DATABASE. THE FRONTEND OR WEB INTERFACE, CAN BE MODIFIED WITH CUSTOM OPTIONS TO PROVIDE THE LOOK AND FEEL THAT AN ORGANIZATION NEEDS. SEVERAL EXAMPLES OF FRONTENDS WOULD BE THEMES THAT ARE AVAILABLE (I.E. EXFOLIATION, VAUTOUR AND ARANA), WEB INTERFACES LIKE VSHELL, NAGIOSDIGGER, MNTOS, CHECK\_MK AND MOBILE INTERFACES LIKE NAGIOS MOBILE, NAG MOBILE AND INAG. VSHELL IS THE OFFICIAL PHP INTERFACE FOR NAGIOS CORE. NAGIOS CORE BY DESIGN FEATURES AND SUPPORTS MANY DIFFERENT ADDONS THAT CAN BE USED WITH IT.

NAGIOS XI TAKES THE NAGIOS CORE AND BUILDS UPON IT TO CREATE AN ENTERPRISE-CLASS MONITORING AND ALERTING SOLUTION THAT IS EASIER TO SET UP AND CONFIGURE USING A PHP FRONTEND. NAGIOS XI USING EASY TO USE NETWORK WIZARDS PROVIDES INFRASTRUCTURE MONITORING OF ALL OF AN ORGANIZATION'S CRITICAL HARDWARE, APPLICATIONS, NETWORK DEVICES AND NETWORK METRICS. THE DASHBOARD FEATURE ALLOWS YOU TO VIEW THE ENTIRE INFRASTRUCTURE VISUALLY AS YOU MONITOR ALL OF THESE SERVICES AND DEVICES. YOU ALSO HAVE THE ALERTING OPTIONS WHICH COMMUNICATE TO ADMINISTRATORS WHEN SERVICES AND HOSTS HAVE PROBLEMS. THE TRENDING AND HARDWARE CAPACITY LIMITS HELP YOU CREATE PROACTIVE DECISIONS ABOUT THE NETWORK AND DEVICES ON THE NETWORK. THE GRAPHICAL INTERFACE IS EASY TO CUSTOMIZE TO FIT THE ORGANIZATION NEEDS AND BY

MONITORING THE GRAPHS WILL HELP YOU PREDICT NETWORK, HARDWARE AND APPLICATION PROBLEMS.

NAGIOS FUSION PROVIDES A GUI FOR CENTRAL MANAGEMENT OF A NETWORK INFRASTRUCTURE SPREAD OVER A LARGE GEOGRAPHICAL AREA. WITH CENTRAL MANAGEMENT NAGIOS FUSION ALLOWS THE ORGANIZATION TO REVIEW THE ORGANIZATION'S ENTIRE STRUCTURE IN ONE LOCATION THROUGH ONE INTERFACE AND YET ALLOW EACH LOCATION TO MANAGE THEIR INFRASTRUCTURE INDEPENDENTLY. TACTICAL OVERVIEW SCREENS PROVIDE A SNAPSHOT OF THE MONITORED DEVICES GLOBALLY.

ABOUT NAGIOS CERTIFIED ADMINISTRATOR CERTIFICATION

THE NAGIOS CERTIFIED ADMINISTRATOR – CORE CERTIFICATION EXAM IS DESIGNED TO TEST THE SKILLS OF AN INDIVIDUAL WHO IS RESPONSIBLE FOR MANAGING THE DAY-TO-DAY OPERATIONS AND MAINTENANCE OF A NAGIOS CORE INSTALLATION. THIS INDIVIDUAL SHOULD BE CAPABLE OF DESIGNING, IMPLEMENTING, AND SUPPORTING A NAGIOS CORE INSTALLATION. TOPICS COVERED INCLUDE GRAPHING AND TRENDING, DISTRIBUTED MONITORING, PASSIVE CHECKS, PERFORMANCE TUNING, AGENTS, AND OTHER ADVANCED TOPICS. DESIGNED FOR IT PROFESSIONALS AND ADMINISTRATORS.

# NAGIOS CERTIFIED ADMINISTRATOR TRAINING

DEVOPSSCHOOL PROVIDES UN-OFFICIAL NAGIOS TRAINING FOR BOTH NAGIOS CORE AND NAGIOS XI. TRAINING SERVICES INCLUDE LIVE TRAINING PERFORMED OVER THE INTERNET OR ON-SITE AS WELL AS SELF-PACED TRAINING FOR THOSE WANTING TO WORK ON THEIR OWN AS THEY HAVE AVAILABLE TIME. THIS

TRAINING PROVIDES USERS WITH COMPREHENSIVE MANUALS WITH STEP-BY-STEP INSTRUCTIONS AND VIDEOS WHICH STUDENTS CAN VIEW IN ORDER TO UNDERSTAND HOW TO IMPLEMENT NAGIOS IN A VARIETY OF WAYS.

# **AGENDA**

# DAY 1

### 1: INTRODUCTION

- NAGIOS MONITORING SOLUTIONS
- SERVICE AND HOST CHECK OPTIONS

### 2: INSTALLATION

- INSTALLING FROM SOURCE
- FILE SYSTEM TREE
- INSTALLATION FROM REPOSITORY

### 3: CONFIGURATION

CONFIGURATION FILES

- ELIMINATING THE HTTP ERROR
- NAGIOS CHECK TRIANGLE
- REVIEW FILE LOCATIONS
- NETWORK ADDRESSING
- IMPLEMENTING CHANGES
- OBJECTS
- OBJECT TYPES
- HOST GROUPS
- SERVICE GROUPS
- CONTACT GROUPS
- OBJECT INHERITANCE
- UNDERSTANDING THE BASICS
- LOCAL VS INHERITED VARIABLES
- CHAINING
- PRECEDENCE IN MULTIPLE SOURCES
- INCOMPLETE OBJECT DEFINITIONS
- CREATING CUSTOM VARIABLES
- CANCELING INHERITANCE
- ADDITIVE INHERITANCE
- USING HOSTGROUPS
- TEMPLATES
- MODIFY TIMEPERIODS
- ILLEGAL OBJECT NAME CHARACTERS
- SECURITY RISKS
- PLUGIN USE
- WEB INTERFACE
- EVENT HANDLERS
- MANAGING NAGIOS TIME
- NAGIOS CORE BACKUP
- REACHABILITY
- VOLATILE SERVICE
- STATE STALKING
- FLAPPING
- PARALLELISM
- ORPHANED SERVICE
- FRESHNESSS
- COMMIT ERROR FROM THE WEB INTERFACE
- NAGIOS CHECKS: ACTIVE/PASSIVE

# DAY 2

### 3: CONFIGURATION

- ACTIVE
- PASSIVE
- DISTRIBUTED MONITORING
- CENTRAL NAGIOS SERVER SET UP

- NON-CENTRAL SET UP
- SENDING MAIL FROM NAGIOS
- NAGIOSTATS
- PERFORMANCE
- CREATE RAM DISK
- CACHING WITH RRDCACHED
- REAPER SETTINGS
- ADDONS
- NDOUTILS
- INSTALL NDOUTILS
- NAGVIS
- UPDATES
- CHECKING FOR UPDATES
- UPDATING NAGIOS CORE

### 4: USER MANAGEMENT

- AUTHENTICATION AND PRIVILEGES
- AUTHENTICATION
- NOTIFICATION
- ESCALATION
- NOTIFICATION: HOST AND SERVICE DEPENDENCIES

### **CHAPTER 5: PUBLIC PORTS**

- CHECK\_PING
- CHECK\_TCP
- CHECK\_SMTP
- CHECK IMAP
- CHECK\_SIMAP1
- CHECK\_FTP
- CHECK\_HTTP
- CHECK\_DIG

### 6: MONITOR LINUX

- NRPE CONCEPTS
- SET UP THE NAGIOS SERVER
- MODIFYING NRPE

# DAY 3

### 7: MONITOR WINDOWS

• INSTALLATION OF NSCLIENT++

- NSCLIENT++ AND CHECK\_NT
- NSCLIENT++ PASSWORD
- NRPE ON NAGIOS SERVER
- NSCLIENT++ AND NRPE
- NRPE: INTERNAL NSCLIENT ++ FUNCTIONS

### 8: MONITOR WITH SSH

- CONFIGURE THE NAGIOS SERVER
- CONFIGURE REMOTE HOST 124
- FROM THE NAGIOS SERVER TEST THE SSH CONNECTION
- USING SSH TO CHECK SERVICES

# DAY 4

### 9: SCALING NAGIOS

- INSTALL CHECK\_MULTI1
- CREATE CHECK\_MULTICMD
- CHECK\_MULTI WITH SSH

### 10: GRAPHING

- PNP4NAGIOS
- NAGIOSGRAPH
- MRTG140
- CACTI ON NAGIOS

# DAY 5

### 11: MONITOR WITH SNMP

- SNMP FOR SERVERS
- ACTIVATE SNMP ON WINDOWS SERVER
- CHECKING SNMP ON A WINDOWS SERVER
- SNMP CHECKS WITH LINUX SERVERS

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### 12: EXERCISES

- EXERCISE #1: INSTALLATION FROM SOURCE
- EXERCISE #2: INCREASING NAGIOS PERFORMANCE
- EXERCISE #3: INSTALLING NRPE