

# OCCUPATIONAL PROFILE FOR NETWORK ADMINISTRATOR

Workers Behaviour	General Knowledge and Skills
<ul style="list-style-type: none"> <li>• Energetic</li> <li>• Impartial</li> <li>• Open minded</li> <li>• Patient</li> <li>• Proactive</li> <li>• Readiness to work</li> <li>• Systematic</li> <li>• Teamwork</li> <li>• Trust worthy</li> </ul>	<ol style="list-style-type: none"> <li>1. Colour coding</li> <li>2. Communication skills</li> <li>3. Computer networks</li> <li>4. Computer skills</li> <li>5. Convincing skills</li> <li>6. Equipment safety</li> <li>7. Good consultants / experts</li> <li>8. Hardware equipment</li> <li>9. IP addressing</li> <li>10. Learning skills</li> <li>11. Network design</li> <li>12. Power supply</li> <li>13. Problem solving skills</li> <li>14. Product in market</li> <li>15. Regulations</li> <li>16. Related web sites</li> <li>17. Teaching skills</li> <li>18. Telecommunications</li> <li>19. Usage of network software</li> <li>20. Labour and employment acts</li> </ol>
TOOLS AND EQUIPMENT	CONCERNS AND FUTURE TRENDS
<ul style="list-style-type: none"> <li>• Cable puncher</li> <li>• Cable tester</li> <li>• Crimping tools</li> <li>• Drilling machine</li> <li>• Hammer</li> <li>• Ladder</li> <li>• Laptop computer</li> <li>• Mobile phone</li> <li>• Multimeter</li> <li>• Screw driver</li> <li>• Software CD</li> <li>• Wire stripper</li> </ul>	<ul style="list-style-type: none"> <li>• Increased bandwidth</li> <li>• Internet on mobile</li> <li>• Paperless office set-up</li> <li>• Rapid technological changes</li> <li>• Security</li> <li>• Trainings</li> <li>• VOIP</li> <li>• Wireless networking</li> <li>• Next generation network</li> </ul>

Endorsed by Technical Advisory Committee (TAC) for ICT sector (TAC - ICT) on 3<sup>rd</sup> October 2007  
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## Occupational Profile for NETWORK ADMINISTRATOR

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**Training Providers, Employers, Employees,  
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# NETWORK ADMINISTRATOR : Duties & Tasks

18 - 19 August 2006

Duties		Tasks												
<b>A</b>	<b>Design network</b>	<b>A1</b> Carry out feasibility study	<b>A2</b> Conduct site survey	<b>A3</b> Sketch network diagram	<b>A4</b> Prepare network drawing	<b>A5</b> Estimate requirements	<b>A6</b> Estimate cost	<b>A7</b> Prepare specifications	<b>A8</b> Evaluate technical specifications	<b>A9</b> Conduct physical verifications	<b>A10</b> Examine technical specifications	<b>A11</b> Obtain approval		
<b>B</b>	<b>Build and secure network</b>	<b>B1</b> Brief network technician on network plan	<b>B2</b> Supervise and guide network technician during building of network	<b>B3</b> Identify Operating system (OS)	<b>B4</b> Configure server	<b>B5</b> Identify software	<b>B6</b> Install anti-virus software	<b>B7</b> Install firewall	<b>B8</b> Secure patches	<b>B9</b> Secure ports	<b>B10</b> Connect uninterrupted power supply	<b>B11</b> Connect lightning protectors	<b>B12</b> Control user access	<b>B13</b> Assign security ID
<b>C</b>	<b>Manage network</b>	<b>C1</b> Manage user account	<b>C2</b> Re-configure internet sharing	<b>C3</b> Set-up network printer	<b>C4</b> Configure files sharing	<b>C5</b> Configure load sharing	<b>C6</b> Monitor traffic	<b>C7</b> Check service status	<b>C8</b> Assign IP address	<b>C9</b> Change setting to optimise network	<b>C10</b> Display notice	<b>C11</b> Re-design network		
<b>D</b>	<b>Maintain network</b>	<b>D1</b> Troubleshoot PC for network problem	<b>D2</b> Check PCI (Peripheral Card Interface) slots	<b>D3</b> Check system configuration	<b>D4</b> Replace faulty network cards	<b>D5</b> Replace faulty cables	<b>D6</b> Maintain server	<b>D7</b> Service hardware	<b>D8</b> Check for service in server					
<b>E</b>	<b>Troubleshoot network</b>	<b>E1</b> Check physical connectivity	<b>E2</b> Check ports	<b>E3</b> Check network card	<b>E4</b> Check network setting	<b>E5</b> Check switch	<b>E6</b> Check server	<b>E7</b> Check hardware driver	<b>E8</b> Check modem	<b>E9</b> Check router	<b>E10</b> Check internet connectivity			
<b>F</b>	<b>Upgrade network</b>	<b>F1</b> Update software	<b>F2</b> Upgrade software	<b>F3</b> Install new software	<b>F4</b> Upgrade hardware	<b>F5</b> Connect new hardware	<b>F6</b> Upgrade bandwidth							
<b>G</b>	<b>Backup data</b>	<b>G1</b> Design back-up plan	<b>G2</b> Program scheduled back-up	<b>G3</b> Make full back-up	<b>G4</b> Make incremental back-up	<b>G5</b> Make differential back-up	<b>G6</b> Make external back-up	<b>G7</b> Carry out remote back-up						
<b>H</b>	<b>Document network</b>	<b>H1</b> Document network drawing explanations	<b>H2</b> List assigned IP addresses	<b>H3</b> Record configuration	<b>H4</b> Record global IP address	<b>H5</b> Record domain names	<b>H6</b> Write down back-up procedures	<b>H7</b> Keep record of equipment	<b>H8</b> Keep maintenance record	<b>H9</b> Record upgradation	<b>H10</b> Prepare terms and conditions for users			
<b>I</b>	<b>Train users / subordinates</b>	<b>I1</b> Identify common problems	<b>I2</b> Design training	<b>I3</b> Prepare manuals	<b>I4</b> Organize / conduct training	<b>I5</b> Give lectures	<b>I6</b> Demonstrate skills	<b>I7</b> Provide safety tips to users	<b>I8</b> Collect feedback					
<b>J</b>	<b>Upgrade knowledge</b>	<b>J1</b> Browse internet for reference	<b>J2</b> Consult experts	<b>J3</b> Subscribe to mailing list	<b>J4</b> Participate in discussion forum	<b>J5</b> Attend training	<b>J6</b> Attend workshops	<b>J7</b> Participate in seminars	<b>J8</b> Study manuals, books, journal and magazines	<b>J9</b> Experiments new ideas / technology				