

Skills Assessment Rubric

All Skills Assessments are marked by a **computer program**. The table below contains all errors that the program will detect and report back on. As the same program is used for all CCNA Exams, some of the errors will not be relevant for this Unit.

The colour in the **Error Description** column will indicate the impact of the error on your assessment result. A **green** background indicates a **minor error** while an **orange** background indicates a **major error** that shows a major lack of understanding and/or will result in all or part of your network not functioning.

Multiple instances of the same minor error will count as one minor error (eg. If you fail to set four Interface Descriptions when required, this will count as one minor error).

Error Category		Error Description
Category	Sub-category	
hostname	not_set	"You have not configured the hostname on the following devices:"
	incorrect	"You have incorrectly configured the hostname on the following devices."
hostname	not_set	"You have not configured the hostname on the following devices:"
	incorrect	"You have incorrectly configured the hostname on the following devices."
motd	not_set	"You have not configured the required MOTD on the following devices:"
	set	"You configured a MOTD (when you were told NOT to) on the following devices:"
irp	bad_protocol	"The following Interior routing protocols have been erroneously configured"
	bad_inconsequential_protocol	"The following (non-functioning) Interior routing protocols have been erroneously configured"

	protocol_not_configured	"The following Interior routing protocols have NOT been configured"
	net_not_advertised	"The following networks are not being advertised when they should be"
	net_advertised	"The following networks are being advertised when they should not be"
	auto_summary_enable_inconsequential	"Auto-Summarisation has not been disabled on the the following devices"
	auto_summary_enable	"Auto-Summarisation has not been disabled on the the following devices"
	redistribute	"Default routes are being redistributed (but should not be) on the following devices"
	no_redistribute	"Default routes are not being redistributed on the following devices"
	bad_network_statements	"The following routing protocol \"network\" statements do not advertise any interfaces on the corresponding router"
	multiple_instances	"The following Interior Routing Protocols have multiple configured instances"
	rip_version	"RIP Version is incorrectly set"
	eigrp_as_mismatch	"EIGRP AS numbers are not common amongst configured devices"
	incorrect_eigrp_as	"EIGRP AS number is incorrectly set"
ospf	single_no_area_0	"You are running a single-area OSPF network but are not using the default area (0)"

	multi_no_area_0	"You are running a multi-area OSPF network but are not using area 0 anywhere"
	area_mismatch	"Interfaces on the same layer-3 link are not advertised in the same OSPF area"
	not_multi_area	"Your OSPF configuration is not a multi-area configuration"
	not_single_area	"Your OSPF configuration is not a single-area configuration"
	group_multi_area	"The following OSPF network groups are not advertised in a single area"
	wrong_area	"The following OSPF network groups are advertised in the wrong area number"
dhcp	not_configured	"DHCP not configured on the following devices:"
	configured	"DHCP configured on the following devices when it should not be:"
	bad_exclusion	"Excluded IP addresses that don't belong to an advertised pool"
	empty_pool	"The following DHCP pools are not advertising any addresses"
	missing_pool	"The following DHCP pools have not been created"
	extra_pool	"You are advertising the following DHCP pools when you should not be"
	pool_property	"The following DHCP Pool properties have not been correctly set"
nat	not_configured	"NAT not configured on the following devices:"
	configured	"NAT configured on the following devices when it should not be:"

no_inside_acl	"No ACL exists on the following NAT pools"
acl_not_optimal	"The following ACLs applied to the (inside) NAT pool are not using an optimal set of rules"
acl_incorrect	"The following ACLs applied to the (inside) NAT pool do not match the required internal IP addresses"
acl_pointless_normal	"The following ACL rules in the NAT pool are pointless, they will never be matched because they are matched by previous rules in the ACL"
acl_pointless_default	"The following ACL rules in the NAT pool are pointless, they will never be matched because they follow a permit deny ip any any rule"
pool_range_outside	"The public NAT pool range extends outside the required range"
pool_range_inside	"The public NAT pool range does not cover the entire required range"
pool_prefix	"The public NAT pool prefix is incorrect"
pool_not_overloaded	"The public NAT pool was not overloaded when it should have been"
pool_overloaded	"The public NAT pool was overloaded when it should not have been"
interface_not_configured	"The following interfaces have not been configured for NAT"
interface_configured	"The following interfaces have been incorrectly configured to support NAT"
no_valid_pool	"No valid NAT pool can be found on the following devices:"

stp	root_not_forced	"You have not forced the following root bridges to be established"
	root_incorrect	"The incorrect switch has been configured to be the root bridge"
	bad_protocol	"The incorrect spanning tree protocol was applied to the following devices"
route	bad_default	"Static default routes have been installed (when there should be none) on the following devices"
	no_default_on_switch	"No default gateway has been programmed on the switch (when there should be"
	no_default_on_device	"No static default gateways/routes have been installed (when there should be) on the following devices"
	default_incorrect	"At least one default static gateway/route has the incorrect next hop or exit interface programmed"
	no_default	"No default static route has been installed on the following devices"
	default_multiple_correct	"Multiple (correct) default static routes configured on the following devices"
	bad_static	"Static routes have been installed (when there should be none) on the following devices"
	no_static_on_device	"No static routes have been installed (when there should be) on the following devices"
	static_incorrect	"At least one static route has the incorrect next hop or exit interface programmed"
	no_static	"The following expected static route(s) have not been found"

	static_multiple_correct	"Multiple (correct) static routes configured on the following devices"
line	no_login	"You have not enabled 'login' on the following devices/lines"
	no_password	"You have not specified any password on the following devices/lines"
	incorrect_password	"You have specified the incorrect password on the following devices/lines"
	enabled	"You have enabled access of the following devices/lines when you were not supposed to"
layer2	port_shutdown	"Switchport is \"shutdown\" when it should be enabled"
	not_shutdown	"Switchport is not \"shutdown\""
	port_mode_configured	"Switchport mode configured when it should not have been"
access	not_configured	"Switchport is not configured in \"access\" mode"
	wrong_vlan	"Switchport access port not in correct VLAN"
trunk	not_configured	"Switchport is not configured in \"trunking\" mode"
	wrong_encapsulation	"Trunking encapsulation incorrect"
	missing_vlans	"Required VLANs not being trunked"
	extra_vlans	"Extra VLANs than those required are being trunked"
	incorrect_native_vlan	"Incorrect Native VLAN on trunk"
switch_security	not_configured	"Did not enable switchport security for the following interface(s):"
	incorrect_setting	"Switch port security details incorrectly configured for the following interface(s):"

vlan	information_not_captured	"VLAN Information not captured on the following switches"
	not_created	"Required VLAN has not been created"
	extra_vlan	"Unnecessary VLAN Created"
	not_active	"Required VLAN not active on switch"
	bad_name	"You have incorrectly named the following VLANs"
layer2_link	not_trunk_both_ends	"Trunk link between the following switches is not trunking at both ends"
	encapsulation_mismatch	"Trunk link between the following switches has a different encapsulation method at each end"
	native_vlan_mismatch	"Trunk link between the following switches has different native VLANs configured at each end"
layer3	interface_not_configured	"Interfaces not configured for the following networks"
	interface_shutdown	"Interfaces still \"shutdown\""
	interface_down	"Interfaces not up"
	bad_network	"Incorrect network address/mask allocated for the following networks"
	incorrect_gateway_address	"Incorrect IP Address configured on a gateway interface"
	incorrect_host_address	"Incorrect IP Addresses configured on a host interface"
	no_address	"No IP Addresses configured for the following interfaces"
	trunk_ip_assigned	"Following trunk interface(s) configured with an IP address when it should have sub-interface addresses only"

	no_clock_dce	"Clock rate not set on DCE interface of serial Link"
	description_not_set	"No Interface description set (required) for the following networks"
	description_set	"Interface description set (when it should not be) for the following networks"
	ospf_point_to_point	"You did not type in the required command (ip ospf network point-to-point) for the following networks"
	configured_if_shutdown	"The following interfaces are \"shutdown\" but have been configured"
	iface_enabled	"You have configured the following interfaces when you should not have"
	sub_int_vlan_mismatch	"Sub-interfaces configured such that sub-interface name does not match the VLAN ID"
	iface_not_configured	"Interfaces not configured for the following networks"
	link_network_mismatch	"Interfaces on a shared Layer 3 link are not all in the same network"
	link_conflict_address	"Interfaces on a shared Layer 3 link have conflicting IP addresses"
	no_clock_set	"Clock rate not set on DCE interface of serial Link"
ppp	enabled	"You have enabled PPP on interfaces on the following devices when you should not have"
	not_enabled	"You have not configured PPP encapsulation on the following interfaces:"
	protocol_conflict	"PPP configuration on a shared Layer 3 link has conflicting PPP"

		protocol types:"
	incorrect_protocol	"Incorrect PPP protocol established on the following PPP links:"
	incorrect_username	"Incorrect PPP username allocated to link"
	incorrect_password	"Incorrect PPP password allocated to link"
	no_account	"The required PPP account does not exist on a device"
	account_invalid_password	"The required PPP account has an invalid password"
acl	applied_acl	"ACLs have been applied to the following interfaces when they should not be"
	not_optimal	"The ACLs applied to the following interfaces are not using an optimal set of rules"
	acl_incorrect	"The ACLs applied to the following interfaces do not implement the required security restrictions"
	acl_pointless_normal	"The following rules in the corresponding ACLs are pointless, they will never be matched because they are matched by previous rules in the ACL"
	acl_pointless_default	"The following rules in the corresponding ACLs are pointless, they will never be matched because they follow a permit deny ip any any rule"
	not_configured	"The following required ACLs have not been applied"
	non_applied_acl	"The following ACLs have been configured on the device but not applied to any interface"
	acl_unclean_prune	"At least one ACL rule contains a source or destination IP range(s)

that is wholly or partially outside the range of addresses equivalent to \"any\"

