

Compliance Evaluation Logic

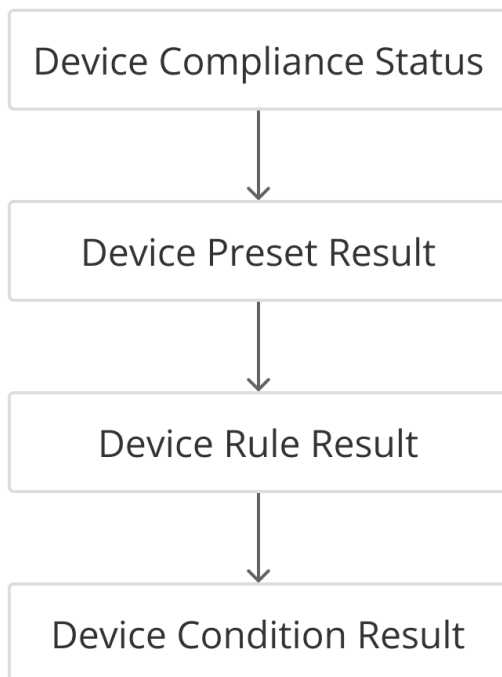
The Compliance Engine evaluates compliance at multiple levels, from individual conditions up to overall device compliance. Each level's status depends on the combined results of the levels beneath it. This hierarchy ensures that a single failing condition can propagate to affect the overall device compliance.

While the **device-level evaluation** focuses on the compliance status of individual devices, the **preset-level evaluation** aggregates these results across all targeted devices within a preset.

Device-level evaluation

Evaluation level result	What It Represents	Scope
Device Compliance Status	Overall compliance status of a device across <i>all</i> Compliance presets.	One device, all presets
Device Preset Result	Evaluation of all rules within a preset for one specific device.	One device, one preset
Device Rule Result	Evaluation of all conditions in a rule for one specific device.	One device, one rule
Device Condition Result	Evaluation of a single condition on a single device.	One device, one condition

Each level's result is determined by the combined results of the levels beneath it. See the hierarchy diagram below:



Device-level evaluation logic

The table below summarizes all possible status combinations for each evaluation level. For each row, the status is calculated based on the combined results from the level directly below it:

- **Device Condition Result:** determined by the actual condition evaluation for that device.
- **Device Rule Result:** determined by the combined result of the device conditions for that device within the rule.
- **Device Preset Result:** determined by the combined result of device rule results for that device within the preset.
- **Device Compliance Status:** determined by the combined result of all the device preset results for that device.

Example: A device preset result can be *Partially Executed* in any of these scenarios:

1. At least one device rule result is *Partially Executed* or *Not Executed* and the rest are *Successful* for that device within the preset.
2. All device rule results are *Partially Executed* for that device within the preset.
3. The device rule results are a combination of *Missing Source* + *Not Executed* for that device within the preset.
4. The device rule results are a combination of *Invalid Source* + *Not Executed* for that device within the preset.

	Compliant / Successful	Non-Compliant / Failed	Partially Executed	Missing Source	Invalid Source	Not Executed	Unmanaged*	Disabled
Device Compliance Status	<i>Compliant</i> if all device preset results = <i>Compliant</i>	<i>Non-Compliant</i> if 1 device preset result = <i>Non-Compliant</i>	<ul style="list-style-type: none"> • 1 device preset result = <i>Not Executed</i>, others = <i>Successful / Invalid Source / Partially Executed / Missing Source</i> <hr/> <ul style="list-style-type: none"> • 1 device preset result = <i>Partially Executed</i>, others = <i>Successful / Invalid Source / Missing Source</i> <hr/> <ul style="list-style-type: none"> • All device preset results = <i>Partially Executed</i> 	All device preset results = <i>Missing Source</i>	<ul style="list-style-type: none"> • All device preset results = <i>Invalid Source</i> <hr/> <ul style="list-style-type: none"> • 1 device preset result = <i>Invalid Source</i>, others = <i>Missing Source + Successful</i> 	All device preset results = <i>Not Executed</i>	All device preset results = <i>Unmanaged</i>	—
Device Preset Result	<i>Compliant</i> if all device rule results = <i>Successful</i>	<i>Non-Compliant</i> if 1 device rule result = <i>Failed</i>	<ul style="list-style-type: none"> • 1 device rule result = <i>Partially Executed</i> or <i>Not Executed</i>, others = <i>Successful</i> <hr/> <ul style="list-style-type: none"> • All device rule results = <i>Partially Executed</i> <hr/> <ul style="list-style-type: none"> • Combination of <i>Missing Source</i> + <i>Not Executed</i> device rule results <hr/> <ul style="list-style-type: none"> • Combination of <i>Invalid Source</i> + <i>Not Executed</i> device rule results 	All device rule results = <i>Missing Source</i>	All device rule results = <i>Invalid Source</i>	All device rule results = <i>Not Executed</i>	All device rule results = <i>Unmanaged</i>	—
Device Rule Result	<ul style="list-style-type: none"> • AND operator: <i>Successful</i> if all conditions are <i>Successful</i> <hr/> <ul style="list-style-type: none"> • OR operator: <i>Successful</i> if 1 condition = <i>Successful</i>, others <i>Failed / Not Executed</i> 	<ul style="list-style-type: none"> • AND: <i>Failed</i> if 1 condition = <i>Failed</i> <hr/> <ul style="list-style-type: none"> • OR: <i>Failed</i> if all conditions = <i>Failed</i> 	<ul style="list-style-type: none"> • AND operator: 1 device condition result = <i>Successful</i>, others = <i>Not Executed</i> <hr/> <ul style="list-style-type: none"> • OR operator: 1 device condition result = <i>Not Executed</i>, others = <i>Failed</i> <hr/> <ul style="list-style-type: none"> • Combination of <i>Missing Source</i> + <i>Not Executed</i> device condition results <hr/> <ul style="list-style-type: none"> • Combination of <i>Invalid Source</i> + <i>Not Executed</i> device condition results 	All device condition results = <i>Missing Source</i>	All device condition results = <i>Invalid Source</i>	All device condition results = <i>Not Executed</i>	All device condition results = <i>Unmanaged</i>	Rule is disabled
Device Condition Result	<i>Successful</i> if condition passed on device	<i>Failed</i> if condition failed on device	—	Required source unavailable	Preset source = Config search & search performed on not the latest device's backup	Condition not yet evaluated on device	Device is unmanaged	Rule is disabled

* - Present only when unmanaged device evaluation is disabled

Preset Status	<i>Compliant</i> if all device preset results are <i>Compliant</i>	<i>Non-Compliant</i> if 1 device preset result is <i>Non-Compliant</i>	<ul style="list-style-type: none"> • 1 device preset result = <i>Partially Executed</i>, others = <i>Successful / Missing Source / Invalid Source</i> <hr/> <ul style="list-style-type: none"> • 1 device preset result = <i>Not Executed</i>, others = <i>Successful / Partially Executed / Missing Source / Invalid Source</i> <hr/> <ul style="list-style-type: none"> • All device preset results = <i>Partially Executed</i> 	<ul style="list-style-type: none"> • All device preset results = <i>Missing Source</i> <hr/> <ul style="list-style-type: none"> • 1 device preset result = <i>Missing Source</i>, others = <i>Successful</i> 	<ul style="list-style-type: none"> • All device preset results = <i>Invalid Source</i> <hr/> <ul style="list-style-type: none"> • 1 device preset result = <i>Invalid Source</i>, others = <i>Successful / Missing Source</i> 	<ul style="list-style-type: none"> • All device preset results = <i>Not Executed</i> <hr/> <ul style="list-style-type: none"> • Preset has no conditions 	All device preset results = <i>Unmanaged</i>	—
Rule Status	<i>Successful</i> if all device rule results = <i>Successful</i>	<i>Failed</i> if 1 device rule result = <i>Failed</i>	<ul style="list-style-type: none"> • All device rule results = <i>Partially Executed</i> <hr/> <ul style="list-style-type: none"> • 1 device rule result = <i>Partially Executed</i>, others = <i>Successful / Missing Source / Invalid Source</i> <hr/> <ul style="list-style-type: none"> • 1 device rule result = <i>Not Executed</i>, others = <i>Successful / Partially Executed / Missing Source / Invalid Source</i> 	<ul style="list-style-type: none"> • All device rule results = <i>Missing Source</i> <hr/> <ul style="list-style-type: none"> • 1 device rule result = <i>Missing Source</i>, others = <i>Successful</i> 	<ul style="list-style-type: none"> • All device rule results = <i>Invalid Source</i> <hr/> <ul style="list-style-type: none"> • 1 device rule result = <i>Invalid Source</i>, others = <i>Successful / Missing Source</i> 	<ul style="list-style-type: none"> • All device rule results = <i>Not Executed</i> <hr/> <ul style="list-style-type: none"> • Rule has no conditions <hr/> <ul style="list-style-type: none"> • Rule was created/modified but never executed 	—	Rule is disabled
Condition Status	<i>Successful</i> if all device condition results = <i>Successful</i>	<i>Failed</i> if 1 device condition result = <i>Failed</i>	<ul style="list-style-type: none"> 1 device condition result = <i>Not Executed</i>, others = <i>Successful / Missing Source / Invalid Source</i> 	<ul style="list-style-type: none"> • All device condition results = <i>Missing Source</i> <hr/> <ul style="list-style-type: none"> • 1 device condition result = <i>Missing Source</i>, others = <i>Successful</i> 	<ul style="list-style-type: none"> • All device condition results = <i>Invalid Source</i> <hr/> <ul style="list-style-type: none"> • 1 device condition result = <i>Invalid Source</i>, others = <i>Missing Source / Successful</i> 	All device condition results = <i>Not Executed</i>	Parent rule disabled	Rule is disabled

* - Present only when unmanaged device evaluation is disabled