Byzantine Fault

Return to Glossary

A **Byzantine Fault** is a condition of a computational system, specifically of distributed computing systems. This condition occurs when one or more components have failed and there is no precise information on whether a component has failed, or if the system information is correct.

A component like a server may appear inconsistently on a **Byzantine Fault** like failing and working in fault detection systems. This occurs because the system presents different symptoms compared to different observers. At this point, it is difficult for the other components to decide to declare it failed and exclude it from the network. To accomplish Byzantine Fault Tolerance (BFT) a consensus must be reached on which component has failed in the first place.

Source: https://academy.bit2me.com/en/what-is-Byzantine-fault/