

Industrial Switch Network Storm



Overview

In industrial Ethernet networks, one incorrect cable connection or misconfigured redundant link can cause more than a temporary slowdown. Industrial Ethernet has become the de facto communication backbone for modern industrial control systems (ICS), connecting PLCs, HMIs, DCS, SCADA, and countless sensors and actuators. It offers flexibility, scalability, and real-time data exchange. However, when improperly configured, it can also. December 2, 2025 Updated on March 4, 2026 Broadcast storms occur when excessive broadcast or multicast traffic overwhelms the network, consuming bandwidth and CPU resources on every connected device. Even a single malfunctioning node can bring a production line to a halt. When separate nodes send/broadcast data across a network link, and other network devices rebroadcast the data back to the network link in. A leading solution supplier for Industrial Communications and IIoT. Committed to Industry Automation Innovation. Lack of Loop Prevention (No Spanning Tree Protocol) Unmanaged switches do not support protocols like Spanning Tree Protocol (STP), which are designed to detect and eliminate Ethernet loops.



Article Content

May 22, 2026

Understanding Storm Control: What It Is and How It Works

Testing and Tuning Storm Control Settings After storm control is configured, it's important to test the system under controlled conditions to ensure it behaves as expected. Simulation

Mar 12, 2026

What Is Broadcast Storm Protection? | Prevent Traffic Overload in ...

In this video, we break down Broadcast Storm Protection, a critical feature in managed Ethernet switches that helps prevent one of the most damaging events in any network: a broadcast storm.

Dec 17, 2025

Understanding Cisco Storm Control: A Comprehensive Guide

Cisco Storm Control is a feature offered on Cisco switches that helps mitigate the detrimental effects of broadcast, multicast, or unicast storms on a network. These storms typically

Aug 02, 2025

Industrial Ethernet Storm

This blog post presents a real-life case study of an Industrial Ethernet storm triggered by a misconfigured switch that led to a broadcast loop, crippling a production facility.

May 10, 2026

Industrial Switches (ISW) | Extreme Networks

Extreme Industrial Switches are an excellent choice for industrial environments, including intelligent transportation systems, utilities, and smart cities. Full redundant ring technology creates fault-

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Hier sollte eine Beschreibung angezeigt werden, diese Seite lässt dies jedoch nicht zu.

Jan 20, 2026

Broadcast Storms in Industrial Ethernet: A Small Loop Can ...

Broadcast storm prevention is not about one single feature. It requires a combination of good network design, proper configuration, and industrial-grade managed switching.

Jul 30, 2025

Spanning Tree Mapping: Preventing Broadcast Storms

In organically grown industrial networks, Layer 2 topology complexity creates hidden risks that can trigger catastrophic network failures. Switching loops occur when

Oct 03, 2025

Configuring Storm Control on a Cisco Switch: Step-by-Step Guide

Configuring Storm Control on a Cisco Switch: Step-by-Step Guide Welcome to our comprehensive tutorial designed for IT professionals and network engineers who are looking to

Jan 06, 2026

Broadcast Storm Handling Strategies for Industrial Ethernet Switches ...

Broadcast Storm Handling Strategies for Industrial Ethernet Switches In industrial network environments, broadcast storms are a common but serious network problem. It may cause network

Jun 26, 2026

StormMaster | Industrial Network Storm & DoS Test Tool

Why test for network storms? Network storms can arise from mis-configuration, cabling loops, malfunctioning devices or targeted DoS attacks and can starve safety-critical controllers of

Nov 30, 2025

Industrial Ethernet Switches

Modernize your operations with Cisco Industrial Ethernet switches: Increase productivity, boost security, and empower industrial AI.

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What is Network Storm?

A network storm is also known as a Broadcast storm. When a network system is overburdened by continuous multicast or broadcast traffic, a broadcast

Jul 22, 2025

Storm Control in Industrial Networks — Preventing

In industrial environments, where devices are added or replaced frequently, maintaining consistent storm control settings across all switches helps

Sep 25, 2025

How to Configure Cisco Storm Control on Network Switches

Step-by-Step Configuration of Cisco Storm Control Configuring Cisco Storm Control involves several steps, from accessing your network devices to setting the appropriate thresholds for

Nov 03, 2025

What is Storm Control?

Storm Control is a network feature used to prevent broadcast, multicast, and unknown unicast storms on a switch. It limits the traffic volume to a predefined threshold, preventing network congestion and

Nov 30, 2025

Impact of Unmanaged Switches on Broadcast Storms in Industrial

Learn how unmanaged switches can lead to broadcast storms affecting device discovery in industrial networks due to lack of loop prevention and broadcast storm control features.

Nov 24, 2025

Security Configuration Guide, Cisco IOS Release 15.2(7)Ex (Catalyst ...

Errors in the protocol-stack implementation, mistakes in network configurations, or users issuing a denial-of-service attack can cause a storm. Storm control (or traffic suppression) monitors

May 23, 2026

Managed Network Switches in Industrial Automation:

Unlike unmanaged switches that simply forward Ethernet frames, managed industrial switches provide fine-grained control and monitoring

Dec 28, 2025

Broadcast Storms

Hello Spicers. So last week, just before heading home, i was told the entire network was down. No access to anything. Panic stations. This was a broadcast Storm. After numerous hours of

May 27, 2026

Mastering Network Stability: The Differences between

In the realm of network management, two key strategies, Traffic Suppression and Storm Control, play pivotal roles in maintaining a stable and

Mar 19, 2026

How to Configure Storm Control on Dell EMC Networking N Series Switch

Symptoms This article discusses the steps to configure storm control on Dell Networking N series switch. Storm Control A traffic storm happens when packets flood the LAN network, creating

Nov 08, 2025

StormMaster | Industrial Network Storm & DoS Test Tool

Run structured storm profiles during Factory and Site Acceptance Tests to uncover weaknesses in switch configurations, redundancy logic or controller behaviour before going live.

May 21, 2026

What Is a Broadcast Storm? Causes, Detection & Prevention in

Learn what causes a broadcast storm, how to detect it, and how managed industrial Ethernet switches with storm control, STP/RSTP, VLANs, and ring redundancy help reduce downtime in OT networks.

Sep 19, 2025

Understanding Storm Control | Junos OS | Juniper Networks

Storm control enables the switch to monitor traffic levels and to drop broadcast, multicast, and unknown unicast packets when a specified traffic level—called the storm control level —is

Mar 27, 2026

Intermittent network storm-ish

I work for an MSP, and we have a branch office of a radiology firm that has periodic network storms that will take down the internal LAN. They have one

Sep 09, 2025

Network Storm/ Network Traffic in honeywell DCS

By definition, a “network storm” (or “data storm”) is excessive transmission of network traffic. Network storms can be experienced on FTE (Fault Tolerant Ethernet) through a variety of

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