

THE MITRE ENGAGE™ MATRIX

The MITRE Engage Matrix is a component of the Engage framework for discussing and planning adversary engagement, deception, and denial activities. Engage is informed by adversary behavior observed in the real world and is intended to drive strategic cyber outcomes. Engage was created to help the private sector, government, and vendor communities to plan and execute the use of adversary engagement strategies and technologies.

OVERVIEW

The Engage Matrix is broken into several components. Across the top of the Matrix are the Engage Goals. Goals are the high-level outcomes you would like your operation to accomplish. The next row contains the Engage Approaches. Approaches let you make progress towards your selected goal. The remainder of the Matrix is composed of the Engage Activities. Activities are driven by real adversary behavior and are the concrete techniques you use in your approach.

These actions are divided into two categories. Strategic goals, approaches, and activities bookend the Matrix and ensure that defenders appropriately drive operations with strategic planning and analysis. Engagement goals, approaches, and activities are the traditional cyber denial and deception activities that are used to drive progress towards the defender's objectives.

When an adversary engages in a specific behavior, they are vulnerable to expose an unintended weakness. In Engage, we look at each ATT&CK® technique to examine the weaknesses revealed and identify an engagement activity or activities to exploit this weakness. By mapping the Engagement Activities to ATT&CK we can better plan which activities will enable us to reach our strategic objectives.

Prepare	Expose		Affect			Elicit		Understand
Plan	Collect	Detect	Prevent	Direct	Disrupt	Reassure	Motivate	Analyze
Cyber Threat Intelligence	API Monitoring	Introduced Vulnerabilities	Baseline	Attack Vector Migration	Isolation	Application Diversity	Application Diversity	After-Action Review
Engagement Environment	Network Monitoring	Lures	Hardware Manipulation	Email Manipulation	Lures	Artifact Diversity	Artifact Diversity	Cyber Threat Intelligence
Gating Criteria	Software Manipulation	Malware Detonation	Isolation	Introduced Vulnerabilities	Network Manipulation	Burn-In	Information Manipulation	Threat Model
Operational Objective	System Activity Monitoring	Network Analysis	Network Manipulation	Lures	Software Manipulation	Email Manipulation	Introduced Vulnerabilities	
Persona Creation			Security Controls	Malware Detonation		Information Manipulation	Malware Detonation	
Storyboarding				Network Manipulation		Network Diversity	Network Diversity	
Threat Model				Peripheral Management		Peripheral Management	Personas	
				Security Controls		Pocket Litter		
				Software Manipulation				

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The Engage Matrix is designed to provide a shared reference to bridge the gap between defenders, vendors, and decision makers.

Maretta Morovitz, MITRE Engage Lead

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For information about MITRE Engage™, contact engage@mitre.org, visit us at engage.mitre.org, or connect with us on LinkedIn @MITRE Engage

MITRE's mission-driven teams are dedicated to solving problems for a safer world. Through our public-private partnerships and federally funded R&D centers, we work across government and in partnership with industry to tackle challenges to the safety, stability, and well-being of our nation.