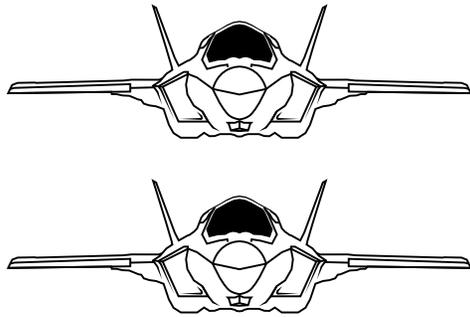


# PRIMER'S NLP PLATFORM: DRIVE INNOVATION, AND ACCELERATE THE DECISION CYCLE

Natural language processing (NLP) at the speed of relevance - providing warfighters and technical experts the ability to blend NLP technology within the organization's fabric, driving innovation and accelerating the decision cycle.



**Situation Overview:** United States Indo-Pacific Command (INDOPACOM) J2 analyst reviewed message traffic that the Chinese government is planning to use an unknown Advanced Persistent Threat (APT) group for an offensive intelligence operation in Southeast Asia. Prior to the alert, AI algorithms connected the intel to bot detection engines that identified an increase in newly created social media accounts claiming to be southeast Asian local influencers. It also connected the intel to signals intelligence (SIGINT) reports of Chinese leadership crafting a narrative of “generosity in supporting major infrastructure projects across the globe.” The analyst pulled up the enriched intel and searched for APT groups associated with the Chinese government and information operations in southeast Asia. She clicked on the key reports flagged and AI algorithms instantly summarized and sourced it in a report. Within 5 minutes, she was in a position to brief leadership on the developments.

## AI POWERED INDICATIONS AND WARNINGS ARE JUST THE START

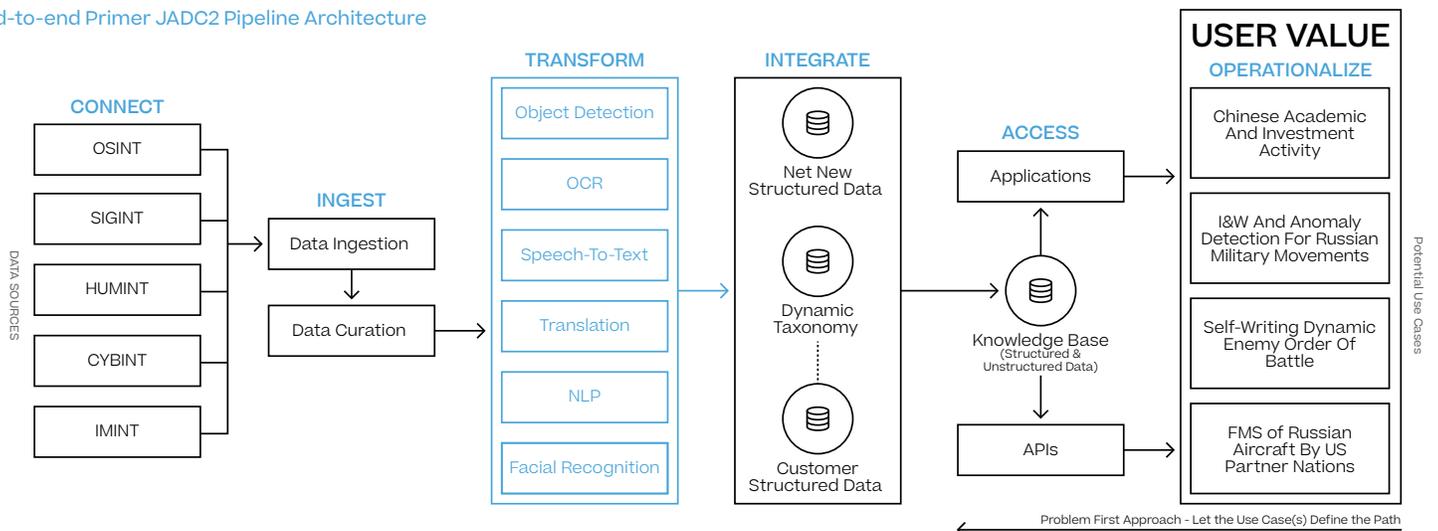
Strategic Indications and Warnings (I&W) are nothing new to the U.S. Air Force. As part of the Advanced Battle Management System (ABMS), the U.S. Air Force developed multiple systems to detect anomalies, model threats, and provide advanced warnings to command and control (C2) elements. Primer’s AI solutions have been integral to these systems in surfacing meaningful intelligence to inform strategic, operational, and tactical C2 decision-making. The partnership has delivered:

- The foundation for Open-source intelligence (OSINT) based enemy order of battle for: foreign military units, non-state actors, criminal organizations, and military equipment for air, land, sea, space, and cyberspace.
- AI-enabled monitoring and alerting that identifies early signs of conflicts.
- Retractable custom models, like relationship extraction, which help identify relationships between entities, such as a country’s military equipment, tied to a specific location.

## NEXT GENERATION NLP PLATFORM FOR SMART AND AI-POWERED AIR FORCE AND SPACE FORCE

Primer’s AI solutions are designed to do more than layer onto existing solutions. Primer provides an end-to-end NLP platform to operationalize AI for strategic advantage. The Primer NLP Platform is modular, performant, and interoperable with ability to ingest unstructured data from wide data sources. Both technical and non-technical users can run NLP models on the data to find meaningful intelligence, or patterns used to inform strategic or tactical C2 decision-making.

End-to-end Primer JADC2 Pipeline Architecture



## PRIMER'S PLATFORM OPERATIONALIZES AI FOR AIRMEN AND GUARDIANS

With Primer's Platform, warfighters and support teams can manage and orchestrate the end-to-end AI/ML lifecycle from raw unstructured data to model deployment to data visualization with ease.

**Access and analyze diverse data types:** Primer simplifies and streamlines data access and preparation for machine learning. Users can ingest structured and unstructured data sources like OSINT, news reporting, social media, scientific periodicals, and classified data sources to enable AI-driven analysis and action.

**Powerful engine library:** Rather than provisioning thousands of NLP models to users, Primer has spent hundreds of hours honing our toolkit to include everything analysts and operators are likely to need, and nothing they don't.

**Easily (re)trainable, highly performant base models:** Primer has spent years tuning and training our base models to human performance level, and provides a no-code platform to retrain models in classified environments. Many off-the-shelf models available today are unable to maintain performance when retrained - perpetuating the false tradeoff between performance and (re)trainability.

**No-code data upload, labeling, training, and deployment:** Primer has designed its industry-first NLP platform for the analyst and operator at the frontlines. Our core user requires the ability to encode their expertise into their models, retrain models based on new mission needs, and to do so rapidly and without any coding skills.

**Easy-to-orchestrate model pipelines:** Primer enables users to stack algorithms to support complex use cases. For example, a Primer Named Entity Recognition model may detect mention of a mobile missile launcher; a Primer Relation Extraction Model might identify the location in which the missile launcher was identified; and a Primer Classification model will scan incoming content for additional data related to the launcher.

**Automate workflows:** Primer's NLP platform automates and manages workflows and model pipelines with a simple, intuitive UX.

**Streamlined model sharing:** In the future, the Services and allied militaries will need to collaborate on new or retrained models based on novel sensor data. Primer removes the friction points with a modular, interoperable and performant architecture that enables non-technical users to share existing or newly-retrained models to other users with the ability to integrate models via API into other applications.

NAICS Codes:

511210 - Software Publishers

518210 - Data Processing, Hosting, and Related Services

CAGE Code: 8EVA5

## CORE BENEFITS

**Easy to Use:** Get started instantly with a plug-and-play API, and everyone on your team can use Primer's no-code UI, no technical experience required.

**Performant:** Deploy performant, fast, and scalable industrial-grade AI/ML to your mission.

**Domain-specific:** Get access to groundbreaking engines trained and tuned for specific domains and data.

**Interoperable:** Seamlessly connect with your existing tools and systems, and you can use our API directly into your applications.

**Customizable:** Rapidly customize models for your unique data and workflows with Primer Automate.

## CUSTOMER TESTIMONIALS

*"Primer continues to lead the way in natural language processing. Their work enables multiple industries and government agencies to move forward on large sets of data in truncated timeframes."*

- Dash Jamieson, Former U.S. Air Force Intelligence Chief

"Military commanders and business leaders live in an increasingly complex information environment which is a morass of equal parts champagne and swill. Rapidly sorting through fact and fiction and pertinent information to enable time sensitive decisions is both more important and more difficult. Primer's technology greatly enhances the ability to perform this critical, in some cases existential, function."

- Tony Thomas, Former Commander, U.S. Special Operations Command

## CUSTOMERS & TECHNOLOGY PARTNERS

Trusted by the U.S. government and Fortune 50 organizations to operate in sensitive and complex data environments, Primer's technology empowers organizations to transform into smart and data-driven organizations.



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