

A Trusted Partner for Federal AI Transformation

SOLUTIONS BRIEF

Agencies today are moving beyond AI experimentation to full-scale production, seeking to unlock significant gains in efficiency, decision quality, and competitive advantage. The rapid evolution of Generative, Agentic, and Physical AI presents a clear mandate to innovate, yet organizations face critical hurdles in harnessing these technologies securely and effectively. The promise of transformation is often challenged by the complexity of building secure data pipelines, managing the model lifecycle, and integrating AI into core business processes.

Successfully operationalizing AI requires more than just deploying the latest model; it demands a robust strategy for ensuring accuracy, security, and governance at scale. Without a proven framework, organizations risk stalled pilots, escalating costs, and compliance gaps that can undermine trust and expose the business to unforeseen risks. The key is to move from isolated use cases to a governed, scalable “AI factory” that consistently delivers measurable business value across the enterprise.

CTG Federal helps agencies navigate this complex landscape by delivering pragmatic, end-to-end AI solutions. We combine deep expertise in enterprise infrastructure with a proven delivery methodology to bridge the gap between AI potential and production reality. We partner with you to discover, design, pilot, and scale high-impact AI solutions—from intelligent document processing to autonomous systems—that reduce costs, increase revenue, and lower risk, ensuring your organization is prepared for the demands of tomorrow.

Our Core AI Solution Areas



GENERATIVE AI

We build secure solutions that allow you to generate and transform content by asking questions of your private enterprise data. Our Retrieval-Augmented Generation (RAG) suites for Text, Multimodal, and Agentic RAG enable use cases like policy Q&A, analysis of scanned forms, and automated compliance dossier creation—all while providing citations and enforcing strict data provenance and access controls.



AGENTIC AI

Beyond conversational AI, we deliver goal-seeking software agents that plan and execute complex, multi-step workflows. By securely integrating with your existing APIs for CRM, ERP, and ITSM systems, these agents automate mission-critical processes like claims coordination, supply chain planning, and client onboarding, all governed by robust operational and safety guardrails.



PHYSICAL AI (ROBOTICS & VISION)

We extend AI to the physical world with solutions for computer vision, autonomous robotics (AMRs/cobots), and edge inference. From intelligent warehouse automation and worker safety monitoring to autonomous inspections, our Physical AI solutions enhance operational efficiency and security at the edge, managed through a centralized fleet operations and safety stack.



HPC FOR AI/ML

Training sophisticated models and running complex simulations requires immense computational power. CTG Federal designs and deploys GPU-accelerated high-performance computing (HPC) clusters with high-throughput storage and fast networking, enabling demanding workloads like genomic sequencing, financial risk analysis, and digital twin simulations.

The CTG AI Factory: A Disciplined Path to Production

CTG Federal utilizes a structured, five-stage delivery model—the AI Factory—to ensure AI initiatives are predictable, measurable, and aligned with strategic goals. This disciplined approach de-risks innovation and accelerates the journey from concept to enterprise-scale impact.



1. DISCOVER

We begin by inventorying potential use cases, mapping them to a value tree, and assessing data readiness, feasibility, and risk to identify the highest-impact opportunities.



2. DESIGN

Our team blueprints the target architecture, defines security controls and acceptance criteria, and establishes clear operational roles and responsibilities for a successful deployment.



3. PILOT (6-10 WEEKS)

We execute a fixed-fee pilot focused on measurable metrics. With human-in-the-loop checkpoints, we validate the solution's performance and business value before scaling.



4. SCALE

The solution is hardened for high availability and disaster recovery. We tune for performance and cost, hand off to operations, and begin working on the next prioritized use case from the backlog.



5. GOVERN

We establish a framework for recurring evaluations of model fairness, accuracy, and robustness. Executive scorecards and regular ROI reviews ensure ongoing alignment and value realization.

Secure & Scalable Foundations

- Data readiness: pipelines, normalization, metadata, lineage
- Operational rigor: LLMops, AgentOps, RoboticOps, MLOps
- Security & compliance: zero trust, encryption, monitoring, HIPAA, PCI, SOX, ISO 27001, SOC 2
- Cost controls: autoscaling, mixed precision, batching, spot GPU scheduling

Next Steps

1. Conduct an AI Readiness Assessment
2. Select 1–2 pilot candidates with clear ROI and compliance fit
3. Stand up reference architecture + pilot (6–10 weeks)
4. Scale through our AI Factory model with executive ROI reviews

Why CTG Federal?

CTG Federal, a Cohesive Technology Group company™, stands out in the crowded field of value-added resellers because of our ability to earn the trust of our customers through our expertise, past performance, and unique approach to the way we do business. Our founders have all worked in the IT space for their entire careers. Their individual experiences and career paths have been varied and include work in contracting, IT service management, military service, and engineering for large systems integrators.

We also stand out due to our strategic partnership with NVIDIA. Agencies trust NVIDIA as a global leader in accelerated computing—with a state-of-the-art infrastructure that powers AI workloads at scale. They also know CTG Federal's proven track record as a trusted technology advisor to the federal government. Now, as an Authorized NVIDIA DGX Solution Provider, CTG Federal can help organizations harness NVIDIA to speed AI deployments, optimize workloads and derive new data insights. Together, our solutions can empower agencies to drive innovation and efficiency in nearly every segment of their operations.

Contracts

DUN & Bradstreet: 080932836

UEI: G2D4Q7UKR5P5

CAGE Code: 7ZHE9

NAICS Code(s): 541519

NASA SEWP V

Contract Number: NNG15SD12B

Group: Group B_Small Business

GSA Multiple Award Schedule (MAS)

Contract Number: 47QTC A25D003P

DOE ICPT

Contract Number: ICPT CISCO BOA 4I-30062-0008A

Dell Technologies ICPT Agreement

Contract Number: 4I-31841 Small Business

Horizon ELA

Contract Number: W519TC-25-D-A005

ITES-4H

Contract Number: W519TC25DA013