International Experts in Claims Analysis, Dispute Resolution, and Project Management for Process, Oil & Gas, Pipeline, Power, Industrial, Infrastructure, and Building Construction Projects

LONG INTERNATIONAL

Federal Engineering & Construction Claims & Consulting Services

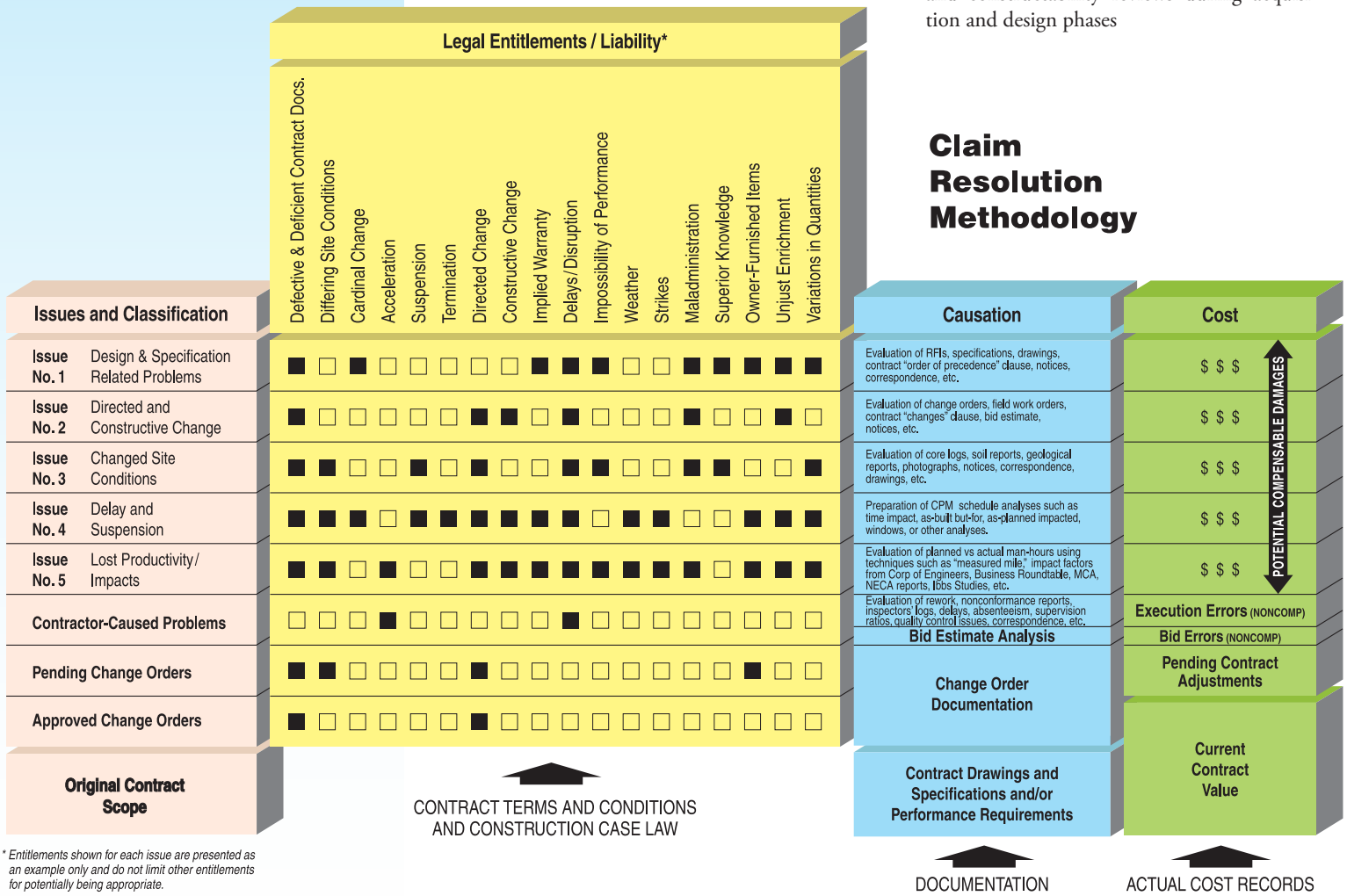
OVERVIEW

Long International is a recognized leader in engineering and construction claims consulting, schedule delay analysis, cost and damages evaluation, risk analysis, and project controls for large-scale capital projects. Our experts have decades of experience executing complex capital asset projects for the **U.S. Army Corps of Engineers (USACE)**, the **Department of Energy (DOE)**, and **Naval Facilities Engineering Systems Command (NAVFAC)**. We deliver technically rigorous, contractually sound, strategically aligned services across the entire lifecycle of a federal construction contract. We also support prime contractors, subcontractors, and government agencies with proactive services.

Core Capabilities

- Development and defense of a **Request for Equitable Adjustment (REA)** and **Certified Claims** for federal engineering and construction contracts
- Expert **Forensic Schedule Delay Analysis** using AACE 29R-03 and/or ASCE 67 17
- Generating a **Time Impact Analysis (TIA)** in Primavera P6 using AACE 52R-06
- Cost and Damages Evaluation: labor inefficiency, equipment delays, escalation, rework, and productivity loss for REAs and Certified Claims
- Detailed pricing and entitlement evaluation of unilateral and bilateral **change orders**, two-part change orders, and Undefinitized Change Orders (UCOs)
- Development of the **Preliminary Project Schedule (PPS)** and **Initial Project Schedule (IPS)**, ensuring compliance with UFGS 01 32 01.00 10 Project Schedule, ER 1-1-11 requirements, and other contractual requirements
- Development of **detailed baseline schedules** in support of DOE critical decisions, ensuring compliance with **DOE Order 413.3B** and DOE Guide 413.3-24
- **Monte Carlo risk analysis** for cost and schedule contingency modeling
- Compliance reviews and guidance for **Earned Value Management Systems (EVMS)**, **Critical Decision (CD)** milestone documentation, and readiness reviews in advance of DOE **Independent Project Reviews (IPRs)**
- **Claims prevention**, project controls training, and constructability reviews during acquisition and design phases

Claim Resolution Methodology



* *Entitlements shown for each issue are presented as an example only and do not limit other entitlements for potentially being appropriate.*

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Cost / Damages Matrix

(All Costs Shown in $000)

Project Work Activities	Original Contract Value	Approved Change Orders	Current Contract Value	Pending Change Orders	Bid Error (Noncompensable)	Contractor Caused Problems (Noncompensable)	Potential Compensable Damages: Issue No. 1 Design Errors	Issue No. 2 Constructive Changes	Issue No. 3 Delay	Issue No. 4 Disruption/ Loss of Productivity	Total Actual Costs
ENGINEERING	$2,500	$400	$2,900	–	–	$120	$250		$500	–	$3,770
EARTHWORK	$1,000	–	$1,000	–	–	$200	–	–	–	–	$1,200
CONCRETE	$500	$20	$520	–	–	$100	–	–	–	–	$620
STRUCTURAL STEEL	$1,000	$100	$1,100	–	–		–	–	–	–	$1,100
INSTALLED EQUIPMENT	$7,200	$900	$8,100	–	–	$50	–	–	–	–	$8,150
PIPING	$2,000	$1,055	$3,055	$2,500	$500	$750	$1,250	$345	–	$2,500	$10,900
Direct Labor	$500	$250	$750	$600	$75	$112	$300	$75	–	$600	$2,512
Labor Taxes & Burdens	$215	$108	$323	$280	$35	$53	$145	$35	–	$280	$1,151
Permanent Material & Equip	$800	$400	$1,200	$950	$200	$300	$475	$100	–	$950	$4,175
Consumable Materials	$50	$25	$75	$50	$10	$15	$40	$5	–	$50	$245
Owned Construction Equipment	$25	$10	$35	$25	$10	$15	$30	$5	–	$25	$145
Rental Equipment	$10	$5	$15	$10	$50	$75	$10	$25	–	$10	$195
Subcontracts	$400	$257	$657	$585	$120	$180	$250	$100	–	$585	$2,477
TANKAGE	$500	$100	$600	–	–	–	–	–	–	–	$600
INSTRUMENTATION	$800	$200	$1,000	$700	–	$600	$1,000	–	–	$700	$4,000
ELECTRICAL	$1,500	$450	$1,950	$900	–	$800	$1,800	–	–	$900	$6,350
PROJECT/CONST MANAGEMENT	$2,000	$425	$2,425	$1,800	$400	$750	$2,200	–	$600	$1,800	$9,975
OTHER FIELD INDIRECTS	$1,500	$300	$1,800	$1,300	$300	$600	$1,000	$300	$450	$1,300	$7,050
HOME OFFICE OVERHEAD	$2,000	$400	$2,400	$800	–	$400	$400	$200	$600	$800	$5,600
FEES/PROFIT	$2,500	$850	$3,350	$1,000	–	–	$800	$80	$750	$1,000	$6,980
TOTAL PROJECT	$25,000	$5,200	$30,200	$9,000	$1,200	$4,370	$8,700	$925	$2,900	$9,000	$66,295

Our Approach

At Long International, we merge deep technical proficiency with fluency in federal construction contracting. Our forensic delay analysts, cost engineers, estimators, and schedulers work collaboratively to build supportable, contracting officer-ready claims, and defensible expert reports. In federal environments, compliance with **Federal Acquisition Regulation (FAR)** and **Defense Federal Acquisition Regulation Supplement (DFARS)** clauses and contractual change management procedures are critical to success. **Our professionals can provide expert support in advance of negotiations with Administrative Contracting Officers (ACOs) and Contracting Officers (COs)**, assist counsel in mediation, and provide expert testimony before the Civilian Board of Contract Appeals (CBCA), Armed Services Board of Contract Appeals (ASBCA), and U.S. Court of Federal Claims.

Our approach is grounded in the belief that successful claim resolution requires more than forensic analysis; it requires deep contextual understanding of how federal agencies interpret contract terms, measure entitlement, and evaluate supporting documentation. Our process emphasizes early engagement, detailed record reviews, and a collaborative model with outside counsel to optimize settlement outcomes. **We leverage decades of institutional knowledge from working with USACE, DOE, and NAVFAC project delivery frameworks.** Whether preemptively supporting REA strategy or responding to a Cure Notice, we adapt our methodology to fit the procedural posture of each dispute and the culture of the agency involved.

Claims Prevention & Project Controls Services

While Long International is best known for resolving complex disputes, we also help prevent them. **Our prevention services are designed to strengthen project delivery systems from day one.** We assist contractors and agencies with implementing quality schedule and cost control systems that align with agency requirements.

We also support federal contractors during proposal development, including schedule risk assessments, **Earned Value Management System (EVMS)** compliance, and pre-award constructability reviews. During execution, our team provides ongoing monitoring of cost/schedule trends and performance indicators, highlighting early warning signs of potential disputes.

We offer tailored training seminars on contract administration best practices, including submittal tracking, daily report standards, and RFI/change tracking. **We also provide in-house claims management trainings** to federal agencies and contractors that set forth examples of the typical causes of claims, detailed explanations of claims entitlement types, schedule delay and damages calculation models, and best practices for prevention of engineering and construction claims.

Federal Engineering & Construction Claims & Consulting Services

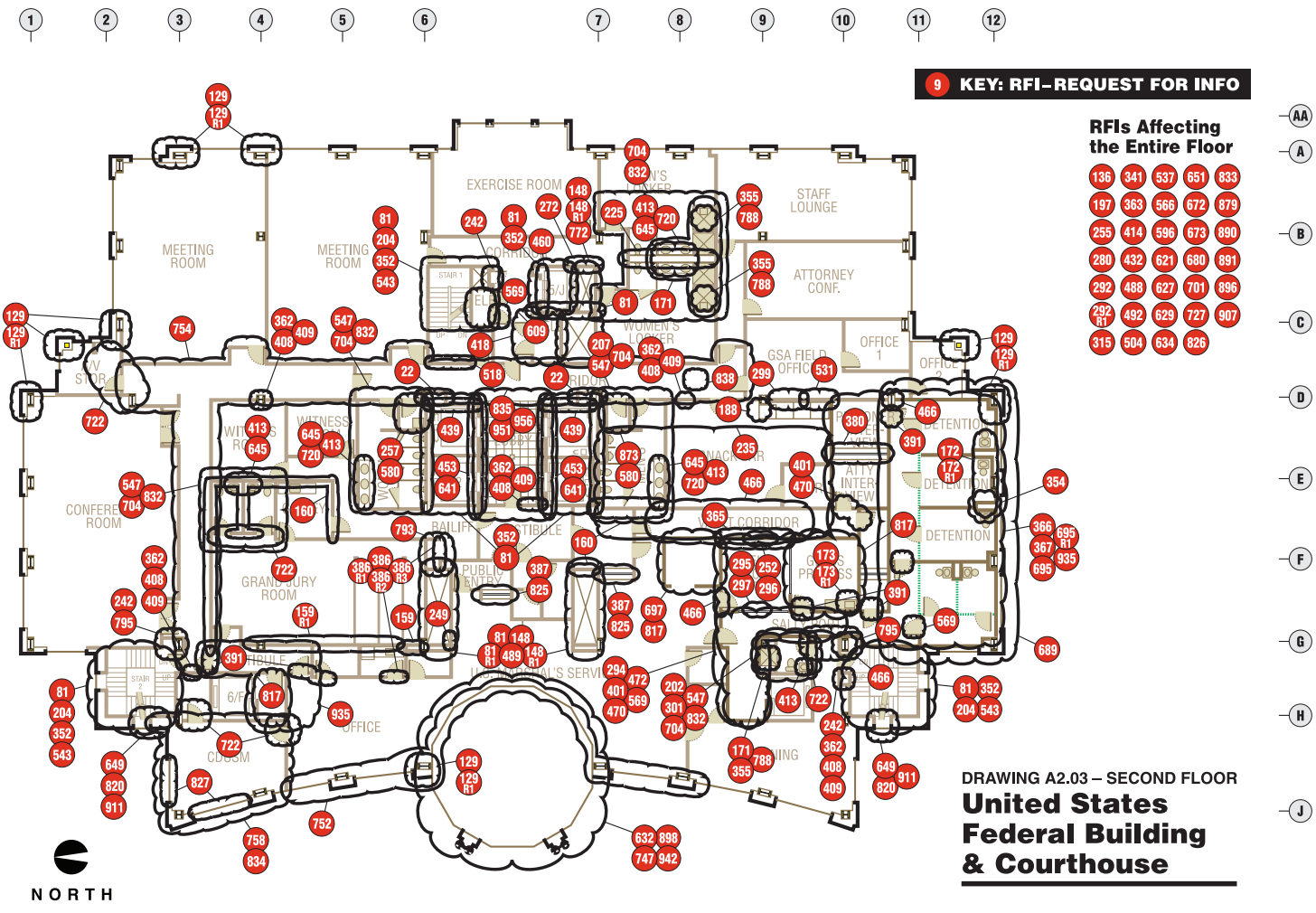
Typical Scope & Deliverables

- Evaluation of government-issued unilateral modifications for schedule and cost entitlement
- **Defense of contractor-initiated claims** related to differing site conditions and constructive changes
- **Preparation of REAs** with detailed fragnets, cost impacts, and narrative justifications
- Assessment of government-contractor correspondence to build timeline of impacts, delays, and scope interpretations
- Quantification of labor inefficiencies due to cumulative impacts of change orders
- Analysis of cost growth related to extended field durations, acceleration, or out-of-sequence work
- Schedule logic audits and float ownership reviews to support entitlement assessments and acceleration decisions
- **Development of defensible Critical Path Method (CPM) schedules** and schedule narratives for project approvals
- Review and QA/QC of schedule updates submitted to DOE or USACE and other federal agencies for contractual compliance
- Preparation of expert reports and demonstrative graphics that align with ASCE 67-17 and AACE 29R-03, as required by **UFGS 01 32 01.00 10 Project Schedule**
- Risk analysis and mitigation recommendations at Critical Decision-1 (CD-1), CD-2, and CD-3 for DOE projects
- Claims prevention audits of active construction projects and contract administration processes

Who We Serve

- Federal prime contractors and A/E/EPCM firms
- Small business primes and DBE firms navigating federal acquisition requirements
- U.S. Army Corps of Engineers (USACE) Districts and Centers of Expertise
- Department of Energy (DOE) National Laboratories and Site Offices
- Naval Facilities Engineering Systems Command (NAVFAC)
- Department of Veterans Affairs (VA) Office of Construction and Facilities Management
- General Services Administration (GSA), Federal Aviation Administration (FAA), and Department of Homeland Security (DHS)
- Civilian agencies delivering mission-critical infrastructure projects
- Construction law firms representing federal clients or contractors in high-stakes disputes
- Government agencies seeking third-party experts for independent reviews, project audits, risk analyses, and claims prevention strategies

We leverage decades of institutional knowledge from working with USACE, DOE, and NAVFAC project delivery frameworks.



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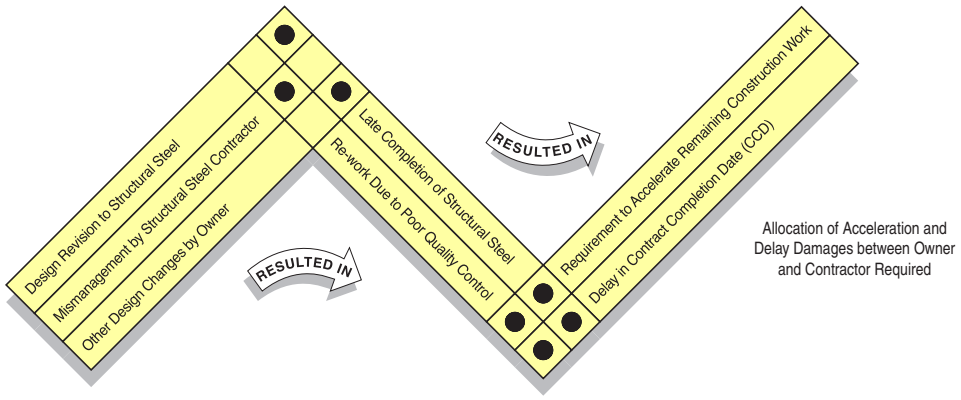
Why Long International?

Long International combines deep technical capabilities with fluency in federal contracting requirements, making us uniquely positioned to support both REA development and expert analysis. Since our founding nearly 30 years ago, our team includes engineers, project and construction managers, estimators, schedulers and schedule delay experts, cost control and quantum experts, risk analysis experts, and accountants who have held roles on both sides of the table. We understand the documentation standards that federal agencies expect, and we prepare our analyses accordingly. **Simply said, experience matters!**

During our consulting careers, our experts have successfully supported over 1,000 projects worldwide, including major industrial, commercial, infrastructure, and U.S. federal construction projects. These federal projects include DOE laboratories, *e.g.*, Stanford Linear Accelerator Center (SLAC), Brookhaven National Laboratory (BNL), Oak Ridge National Laboratory (ORNL), USACE civil works megaprojects, and NAVFAC infrastructure upgrades.

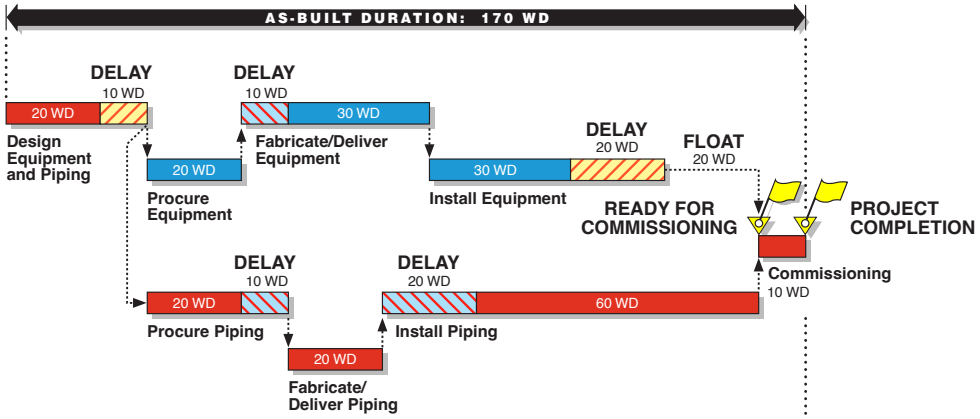
Our deliverables stand out not only for their accuracy but also for their clarity. We invest heavily in high-quality graphics, schedule exhibits, and damage models that distill complex issues into persuasive visuals—an essential component in agency board proceedings and negotiations. **Our graphics transform complex data—costs, schedules, causation, and spatial impacts—into clear, visual narratives that support and strengthen our expert conclusions.**



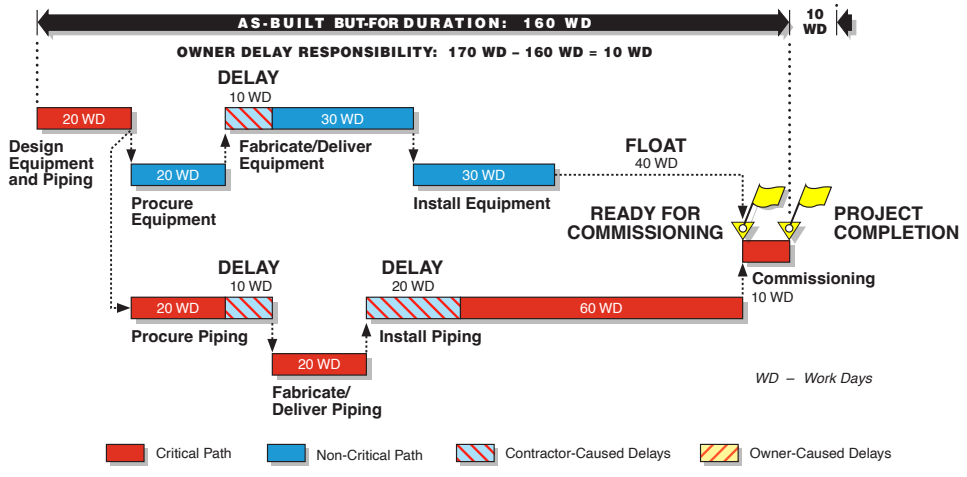
Allocation of Acceleration and Delay Damages between Owner and Contractor Required

In federal environments, compliance with FAR and DFARS clauses and contractual change management procedures are critical to success.

As-Built Schedule Showing Owner-Caused and Contractor-Caused Delays



As-Built But-For Schedule With Owner-Caused Delays Removed



Note: Because of contractor-caused delays on the critical path, the Project Completion could have been achieved only 10 WD earlier if the owner-caused delays did not occur. Therefore, the owner's responsibility for a compensable delay is 10 WD.

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