

Email Opt-in Widget System: Logical Content Flow

SECTION 1: SYSTEM OVERVIEW & ARCHITECTURE

Start with the big picture before diving into details

1.1 System Overview

- What the system does and why it exists
- Key benefits for business users vs developers
- Architecture components (OpnForm, GTM, JSON, JavaScript, Analytics)

1.2 How It All Works Together

- High-level workflow: GTM → JSON Config → Widget → OpnForm → Analytics
 - Separation of concerns: Business logic vs technical implementation
 - Integration points and data flow
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SECTION 2: CONFIGURATION SYSTEM

Core concept that everything else builds upon

2.1 JSON Configuration Philosophy

- Why JSON configs vs hardcoded JavaScript
- Business-focused vs technical parameters
- Configuration inheritance and overrides

2.2 Parameter Extraction & Mapping

- What was extracted from JavaScript widget code
- What was removed and why (technical/builder settings)
- Complete parameter reference table (JSON ↔ JavaScript)

2.3 Configuration Examples by Use Case

- Basic setup (minimal config)
 - E-commerce holiday campaign
 - B2B newsletter signup
 - Mobile app download promotion
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SECTION 3: CORE WIDGET BEHAVIORS

The meat of what the widget actually does

3.1 Display Logic & Triggers

- When and how widgets appear
- Trigger delay and user interaction requirements
- Page-specific and contextual display rules

3.2 Auto-Close & Timing Behaviors

- Inactivity-based auto-close
- Post-submission auto-close
- Manual close priority (user control)
- Device-specific timing (mobile vs desktop)
- Best practices and anti-patterns

3.3 User Experience States

- New user vs returning user behavior
- Session state management
- Cookie-based behavior scenarios
- Cross-device consistency



SECTION 4: SESSION & STATE MANAGEMENT

How the system tracks users across time

4.1 Cookie Strategy

- Session cookies vs persistent cookies
- Dismissal cooldowns vs conversion tracking
- Privacy and compliance considerations

4.2 User State Machine

- New, returning, engaged, converted, cooldown states
- State transitions and behavior changes
- Cross-session user recognition

4.3 Frequency Controls

- Impression limits (per session, per day, per campaign)
- Cooldown periods after different actions

- Balancing persistence with politeness
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SECTION 5: GTM INTEGRATION

How Google Tag Manager controls everything

5.1 GTM Setup & Configuration

- Triggers: When to fire the widget
- Variables: Dynamic values and context
- Tags: Widget deployment and integrations

5.2 Conditional Logic & Targeting

- Page-specific rules
- Traffic source targeting
- User behavior and engagement rules
- Device and geographic targeting

5.3 Logged-in User Handling

- Email pre-population from cookies/storage
 - Personalization variables
 - Account-type based messaging
 - Business vs personal email detection
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SECTION 6: ANALYTICS & OPTIMIZATION

Measuring success and improving performance

6.1 Event Tracking

- Core widget events (impression, interaction, conversion)
- Session-based analytics
- Cross-campaign attribution

6.2 A/B Testing & Variants

- Variant configuration and traffic splitting
- Performance measurement
- Test result interpretation

6.3 Reporting & Insights

- GTM + GA4 integration
 - Custom reports and dashboards
 - Performance optimization recommendations
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SECTION 7: IMPLEMENTATION GUIDES

Practical how-to information

7.1 Quick Start Guide

- Minimal setup for basic popup
- Common configuration patterns
- Troubleshooting checklist

7.2 Advanced Configuration

- Multi-campaign management
- Complex targeting rules
- Custom integrations (CRM, email platforms)

7.3 Testing & Debugging

- GTM preview mode usage
 - Console debugging techniques
 - Common issues and solutions
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SECTION 8: REFERENCE MATERIALS

Comprehensive lookup information

8.1 Complete Parameter Reference

- All configuration options with examples
- Default values and acceptable ranges
- Business impact of each setting

8.2 GTM Variable Reference

- All GTM variables with configuration details
- Use cases and business logic
- Integration examples

8.3 API & Integration Reference

- OpnForm integration details
 - Third-party service connections
 - Webhook and callback configurations
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✓ **SECTION 9: BEST PRACTICES & GUIDELINES**

Expert recommendations and lessons learned

9.1 User Experience Best Practices

- Timing recommendations by industry
- Mobile optimization guidelines
- Accessibility considerations

9.2 Performance Optimization

- Configuration for different site types
- Loading and resource management
- Conversion rate optimization tips

9.3 Privacy & Compliance

- Cookie consent integration
 - GDPR/CCPA considerations
 - Data handling best practices
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🔧 **APPENDICES**

Supporting technical information

Appendix A: Migration Guide

- Moving from hardcoded widgets to JSON config
- Updating existing GTM implementations

Appendix B: Troubleshooting Guide

- Common issues and solutions
- Debug mode usage
- Support resources

Appendix C: Integration Examples

- Complete implementation examples

- Code snippets and templates
 - Testing scenarios
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CONTENT ORGANIZATION PRINCIPLES

Progressive Disclosure

1. **Overview** → **Concepts** → **Implementation** → **Reference**
2. Start broad, get specific
3. Business value before technical details

Audience-Specific Paths

- **Business Users:** Sections 1-3, 6, 9
- **Developers:** Sections 1-2, 4-5, 7-8
- **GTM Specialists:** Sections 2, 5, 7-8
- **Quick Reference:** Section 8

Cross-References





- Link related concepts across sections
- Provide "See also" references
- Include practical examples in every section

Visual Hierarchy







- Use consistent heading levels
 - Include comparison tables
 - Add workflow diagrams
 - Highlight key decisions and trade-offs
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KEY IMPROVEMENTS TO CURRENT STRUCTURE

What Works Well:

-  Comprehensive technical coverage
-  Detailed parameter mappings
-  Real-world examples
-  Business context for technical decisions

What Could Be Better:

-  **Start with overview before diving into details**
-  **Group related concepts together** (all auto-close info in one section)
-  **Separate reference material from tutorial content**
-  **Add clear audience paths** (what to read based on your role)
-  **Include more visual elements** (diagrams, workflows)
-  **Provide quick-start path** for common use cases

Suggested Next Steps:

1. **Create executive summary** (1-2 pages for stakeholders)
2. **Add workflow diagrams** (how data flows through the system)
3. **Build quick-start tutorial** (get running in 15 minutes)
4. **Separate comprehensive reference** from implementation guides
5. **Add troubleshooting decision trees**