Mirador Usage Instructions

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Author: Manus Al **Date:** June 6, 2025

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Getting Started

Initial System Check

Before using Mirador for personal life automation, verify that all components are properly configured and operational. The system check ensures that models are available, performance is optimal, and all supporting scripts are functional.

Begin by navigating to your Mirador installation directory and running the comprehensive system verification. This process validates that Ollama is running correctly, all required models are installed, and the mirador-ez command interface is accessible. The verification also checks that version control is properly configured and that backup systems are operational.

```
# Navigate to Mirador directory
cd ~/ai_framework_git

# Run comprehensive system check
./version_info.sh

# Verify all models are available
ollama list | grep -E "(enhanced_agent|financial_planning|
louisville_expert)"
```

```
# Test basic functionality
mirador-ez ask financial_planning_expert_v5 "Quick system test"
```

The system check should confirm that enhanced_agent_fast_v3, financial_planning_expert_v5, and louisville_expert_v2 are all available and responsive. Response times should be under 30 seconds for individual queries, indicating that your system is ready for production use.

Understanding Mirador's Approach

Mirador operates on the principle of specialized AI collaboration rather than relying on a single general-purpose model. This approach enables the system to provide domain-specific expertise while maintaining coherent analysis across multiple areas of personal life management. Understanding this collaborative model is essential for effective usage.

The framework distinguishes between individual model queries and chain orchestration. Individual queries provide focused expertise from a single specialist, while chains combine multiple specialists to create comprehensive analysis that exceeds what any individual model could provide. This distinction influences how you structure requests and interpret results.

When using Mirador, consider whether your need requires single-domain expertise or multi-domain integration. Financial planning questions may benefit from the financial planning expert alone, while major life decisions like home purchasing require chain orchestration that combines financial analysis, local market knowledge, and strategic planning.

First Successful Query

Your first Mirador query should demonstrate the system's capability while building confidence in its reliability and usefulness. Start with a straightforward financial planning request that showcases the Louisville-specific expertise and practical guidance that distinguishes Mirador from generic AI assistants.

```
# Test financial planning expertise
mirador-ez ask financial_planning_expert_v5
"Budget guidance for Louisville family making 75000 per year"
```

This query should generate a comprehensive response that includes Kentucky tax considerations, Louisville housing cost estimates, and specific local resources. The response demonstrates Mirador's ability to provide actionable, location-specific guidance rather than generic financial advice.

Successful execution indicates that the financial planning expert is properly configured and capable of processing income information accurately. The response should be substantial (400-600 words) and include specific Louisville references such as Jefferson County property taxes, JCPS considerations, and TARC transportation options.

First Successful Chain

After validating individual model performance, test the chain orchestration capability that represents Mirador's core value proposition. A successful chain demonstrates the system's ability to combine multiple specialists for comprehensive analysis.

```
# Test chain orchestration
mirador-ez chain "Create comprehensive financial plan for
Louisville family" financial_planning_expert_v5
enhanced_agent_fast_v3
```

This chain should execute in 30-60 seconds and produce a comprehensive analysis that builds upon the financial expert's initial recommendations with strategic enhancement from the enhanced agent. The result should demonstrate clear value addition, with the enhanced agent contributing strategic insights, implementation guidance, and optimization recommendations.

Monitor the chain execution to ensure that both models contribute meaningfully to the final result. The financial planning expert should provide the foundational analysis, while the enhanced agent should add strategic depth and actionable next steps. This collaboration pattern forms the basis for all advanced Mirador usage.

Basic Operations

Individual Model Queries

Individual model queries provide focused expertise from a single specialist and represent the foundation of Mirador usage. These queries are ideal when you need specific domain knowledge without the complexity of multi-model analysis. Understanding how to effectively structure individual queries maximizes the value you receive from each specialist.

The financial planning expert excels at budget analysis, savings strategies, and Louisville-specific financial guidance. When querying this model, provide specific income information and clear objectives to receive the most actionable advice. The model performs best with concrete numbers and specific scenarios rather than abstract financial concepts.

```
# Effective financial planning queries
mirador-ez ask financial_planning_expert_v5
"Budget optimization for 85000 annual income with goal of buying
home in Louisville"

mirador-ez ask financial_planning_expert_v5 "Savings strategy
for family with 65000 income planning for JCPS school expenses"

mirador-ez ask financial_planning_expert_v5
"Debt reduction plan for Louisville resident with 45000 income
and 15000 credit card debt"
```

The Louisville expert provides local resource integration and guidance for navigating Jefferson County services, JCPS educational options, and Metro Government programs. This model excels at connecting personal needs with available local resources and providing practical implementation guidance.

```
# Effective Louisville expert queries
mirador-ez ask louisville_expert_v2 "Best neighborhoods for
young family with 200000 home budget near good JCPS schools"

mirador-ez ask louisville_expert_v2 "Local resources for small
business startup in Louisville Metro area"

mirador-ez ask louisville_expert_v2
"TARC transportation options for commuting from Highlands to
downtown Louisville"
```

The enhanced agent fast provides strategic analysis and synthesis capabilities, though it performs best in chain contexts rather than individual queries. When used individually, focus on requests that require analytical depth and strategic thinking rather than domain-specific knowledge.

Chain Orchestration Fundamentals

Chain orchestration represents Mirador's most powerful capability, enabling multiple specialists to collaborate on complex personal life decisions. Effective chain usage requires understanding how to structure requests, select appropriate model combinations, and interpret collaborative results.

The most effective chains combine complementary expertise to address multi-faceted personal decisions. Financial planning combined with local knowledge creates comprehensive guidance for major purchases, career decisions, and life transitions.

Strategic enhancement adds implementation planning and optimization recommendations to domain-specific analysis.

```
# Fundamental chain patterns
mirador-ez chain "Comprehensive home buying strategy for
Louisville" financial_planning_expert_v5 louisville_expert_v2
enhanced_agent_fast_v3

mirador-ez chain "Career transition planning with local
considerations" financial_planning_expert_v5
enhanced_agent_fast_v3

mirador-ez chain "Family education planning for JCPS system"
louisville_expert_v2 enhanced_agent_fast_v3
```

Chain execution typically requires 30-90 seconds depending on the complexity of the request and the number of models involved. Monitor execution progress to ensure that each model contributes meaningfully to the analysis. Successful chains show clear value addition at each step, with later models building upon earlier analysis rather than simply repeating information.

The order of models in a chain significantly impacts the final result. Begin with domain specialists that provide foundational knowledge, then add strategic enhancement and synthesis. This progression ensures that strategic recommendations are grounded in domain expertise and practical considerations.

Output Management

Mirador generates substantial output that requires effective management for long-term value. The system automatically organizes outputs by date and categorizes them by type, but understanding the output structure enables more effective review and reference.

Chain outputs are stored in timestamped directories within the outputs folder, with separate files for each model's contribution and a comprehensive summary that synthesizes the collaborative result. Individual query outputs are typically displayed directly but can be redirected to files for permanent reference.

```
# Output management commands
ls outputs/ | tail -10 # View recent chain outputs
cat outputs/chain_*/summary.md # Review chain summaries
find outputs/ -name "*.md" -mtime -7 # Find outputs from last
week
```

Effective output management involves regular review of chain summaries to identify patterns, successful strategies, and areas for optimization. The summary files provide the most valuable content for ongoing reference and decision-making support.

Consider creating a personal knowledge base by organizing particularly valuable outputs into topic-specific folders. This organization enables quick reference during future decision-making and helps identify areas where additional analysis might be beneficial.

Performance Monitoring

Regular performance monitoring ensures that Mirador continues to operate at optimal efficiency and reliability. The system includes built-in monitoring tools that track response times, success rates, and output quality metrics.

```
# Performance monitoring commands
./test_model_performance.sh financial_planning_expert_v5
"Performance test query"
./test_model_performance.sh enhanced_agent_fast_v3 "Chain collaboration test"
time mirador-ez chain "Performance benchmark"
financial_planning_expert_v5 enhanced_agent_fast_v3
```

Monitor individual model response times to identify performance degradation that might indicate system resource constraints or model configuration issues. Response times consistently over 60 seconds suggest the need for system optimization or resource allocation adjustments.

Chain execution times provide insight into overall system efficiency and the effectiveness of model collaboration. Successful chains should complete within 90 seconds for three-model combinations, with clear value addition at each step.

Advanced Chain Patterns

Multi-Domain Integration Chains

Advanced Mirador usage involves developing sophisticated chain patterns that integrate multiple domains of personal life management. These patterns address complex decisions that require consideration of financial, local, strategic, and implementation factors simultaneously.

The comprehensive life decision chain represents the most sophisticated pattern, combining all available specialists to address major life transitions such as career

changes, relocation decisions, or family planning. This pattern requires careful orchestration to ensure that each model contributes unique value without redundancy.

```
# Comprehensive life decision chain
mirador-ez chain
"Complete analysis for relocating to Louisville for new job
opportunity" financial_planning_expert_v5 louisville_expert_v2
enhanced_agent_fast_v3
```

This chain pattern begins with financial analysis to establish budget parameters and economic feasibility. The Louisville expert then provides local context including housing markets, school districts, transportation options, and community resources. The enhanced agent synthesizes this information into strategic recommendations with implementation timelines and optimization opportunities.

The financial optimization chain focuses specifically on maximizing financial outcomes while accounting for local opportunities and constraints. This pattern is particularly effective for major financial decisions such as home purchases, investment strategies, or debt management plans.

```
# Financial optimization chain
mirador-ez chain "Optimize savings and investment strategy for
Louisville resident" financial_planning_expert_v5
enhanced_agent_fast_v3
```

Local resource maximization chains leverage the Louisville expert's knowledge to identify opportunities and resources that align with personal goals and circumstances. These chains are valuable for discovering local programs, services, and opportunities that might otherwise be overlooked.

```
# Local resource maximization chain
mirador-ez chain "Identify all relevant local resources for
young family in Louisville" louisville_expert_v2
enhanced_agent_fast_v3
```

Iterative Analysis Patterns

Sophisticated Mirador usage involves iterative analysis patterns that build upon previous results to achieve deeper insights and more refined recommendations. These patterns are particularly valuable for complex decisions that benefit from multiple perspectives and progressive refinement.

The iterative refinement pattern involves running initial analysis, reviewing results, and then conducting follow-up analysis that addresses specific questions or concerns identified in the initial review. This approach enables progressive optimization of recommendations and strategies.

```
# Initial analysis
mirador-ez chain "Initial home buying strategy for Louisville"
financial_planning_expert_v5 louisville_expert_v2

# Review output and identify specific concerns
cat outputs/chain_*/summary.md

# Follow-up analysis addressing specific concerns
mirador-ez chain "Detailed analysis of identified neighborhoods
with specific budget constraints" louisville_expert_v2
enhanced_agent_fast_v3
```

The comparative analysis pattern involves running similar chains with different parameters or assumptions to evaluate alternatives and identify optimal strategies. This approach is particularly valuable for major decisions where multiple viable options exist.

```
# Compare different budget scenarios
mirador-ez chain "Home buying strategy with 250000 budget"
financial_planning_expert_v5 louisville_expert_v2
mirador-ez chain "Home buying strategy with 300000 budget"
financial_planning_expert_v5 louisville_expert_v2

# Compare different neighborhood priorities
mirador-ez chain "Home search prioritizing school quality"
louisville_expert_v2 enhanced_agent_fast_v3
mirador-ez chain "Home search prioritizing commute convenience"
louisville_expert_v2 enhanced_agent_fast_v3
```

Seasonal and Lifecycle Patterns

Advanced Mirador usage involves developing patterns that account for seasonal considerations and lifecycle transitions. These patterns recognize that personal life optimization requires different strategies at different times and life stages.

Seasonal optimization patterns leverage knowledge of Louisville's climate, school calendars, and local economic cycles to provide timely recommendations. These patterns are particularly valuable for financial planning, home maintenance, and activity planning.

```
# Seasonal financial planning
mirador-ez chain "Winter budget optimization for Louisville
family" financial_planning_expert_v5 enhanced_agent_fast_v3

# Seasonal local resource utilization
mirador-ez chain "Summer activity and resource planning for
Louisville family" louisville_expert_v2 enhanced_agent_fast_v3
```

Lifecycle transition patterns address major life changes such as career transitions, family expansion, retirement planning, or educational milestones. These patterns require comprehensive analysis that accounts for changing priorities and circumstances.

```
# Career transition planning
mirador-ez chain "Career change strategy with family
considerations in Louisville" financial_planning_expert_v5
louisville_expert_v2 enhanced_agent_fast_v3

# Family expansion planning
mirador-ez chain "Financial and logistical planning for family
expansion" financial_planning_expert_v5 louisville_expert_v2
enhanced_agent_fast_v3
```

Model-Specific Usage

Financial Planning Expert V5 Optimization

The financial planning expert represents Mirador's most sophisticated domain specialist, requiring specific usage patterns to maximize effectiveness. Understanding the model's strengths, limitations, and optimal input formats ensures consistent, high-quality financial guidance.

The model excels at comprehensive budget analysis when provided with specific income information and clear financial objectives. Input formatting significantly impacts response quality, with certain formats producing more reliable results than others. Successful usage requires understanding these format preferences and structuring queries accordingly.

```
# Optimal input formats for financial planning expert
mirador-ez ask financial_planning_expert_v5
"Budget guidance for someone making 75000 per year"
mirador-ez ask financial_planning_expert_v5 "Financial plan for
seventy-five thousand annual income"
```

```
mirador-ez ask financial_planning_expert_v5 "Savings strategy
for family earning 85000 annually"
```

The model provides the most value when queries include specific Louisville context and clear financial goals. Generic financial questions produce less actionable results than queries that leverage the model's local expertise and specialization.

```
# Louisville-specific financial queries
mirador-ez ask financial_planning_expert_v5 "Home buying budget
for Louisville family with 90000 income considering Jefferson
County taxes"
mirador-ez ask financial_planning_expert_v5
"JCPS school expense planning for family with 70000 income"
mirador-ez ask financial_planning_expert_v5 "Retirement savings
strategy accounting for Kentucky tax advantages"
```

The financial planning expert performs exceptionally well in chain contexts, where its foundational analysis can be enhanced by strategic recommendations from the enhanced agent. This collaboration pattern produces the most comprehensive and actionable financial guidance.

Louisville Expert V2 Maximization

The Louisville expert provides unique value through its deep integration with local knowledge and resources. Maximizing this model's effectiveness requires understanding its knowledge domains and structuring queries to leverage its specialized capabilities.

The model excels at connecting personal needs with specific local resources, providing practical implementation guidance that generic AI systems cannot match. Queries that specify particular needs or circumstances produce more targeted and useful recommendations.

```
# Targeted local resource queries
mirador-ez ask louisville_expert_v2 "Best JCPS elementary
schools in Highlands area with strong STEM programs"
mirador-ez ask louisville_expert_v2 "Small business resources
and support programs available through Louisville Metro"
mirador-ez ask louisville_expert_v2 "Public transportation
options for commuting from St. Matthews to University of
Louisville"
```

The model provides significant value when queries involve local decision-making that requires knowledge of neighborhood characteristics, local services, or community

resources. This specialization makes it particularly valuable for housing decisions, school selection, and local business planning.

The Louisville expert works exceptionally well in combination with the financial planning expert for decisions that require both financial analysis and local market knowledge. This combination produces comprehensive guidance for major local decisions.

Enhanced Agent Fast V3 Strategic Usage

The enhanced agent fast serves as Mirador's strategic synthesis specialist, designed to build upon domain-specific analysis with strategic insights and implementation guidance. Understanding its role in the collaborative framework ensures optimal utilization.

The model performs best when provided with substantial foundational analysis from domain specialists. Its value lies in strategic enhancement rather than initial analysis, making it most effective as the final model in multi-model chains.

```
# Optimal enhanced agent usage in chains
mirador-ez chain "Strategic enhancement of financial analysis"
financial_planning_expert_v5 enhanced_agent_fast_v3
mirador-ez chain "Implementation planning for local resource
utilization" louisville_expert_v2 enhanced_agent_fast_v3
```

The enhanced agent excels at identifying optimization opportunities, developing implementation timelines, and providing strategic recommendations that build upon domain-specific analysis. Its contributions typically focus on practical next steps and strategic considerations rather than domain expertise.

When used individually, the enhanced agent provides value for strategic analysis and planning questions that require analytical depth rather than domain-specific knowledge. However, its primary value lies in collaborative contexts where it can enhance specialist analysis.

Performance Optimization

System Resource Management

Optimal Mirador performance requires effective management of system resources, particularly memory and processing capacity. Understanding resource requirements and optimization strategies ensures consistent performance and reliability.

Monitor system resource usage during chain execution to identify potential bottlenecks or constraints. Multiple concurrent model executions can strain system resources, particularly on systems with limited memory capacity.

```
# Resource monitoring during execution
top -pid $(pgrep ollama) # Monitor Ollama resource usage
vm_stat | grep "Pages free" # Check available memory
iostat 1 5 # Monitor disk I/O during model loading
```

Optimize system performance by closing unnecessary applications during intensive Mirador usage, particularly applications that consume significant memory or processing resources. This optimization is particularly important for complex chains involving multiple models.

Consider scheduling intensive Mirador usage during periods when other system demands are minimal. This approach ensures optimal resource availability and consistent performance.

Model Parameter Optimization

Advanced users can optimize model parameters to balance response quality with performance requirements. Understanding parameter impacts enables fine-tuning for specific use cases and performance constraints.

Temperature settings affect response creativity and consistency, with lower values producing more focused responses and higher values enabling more creative analysis. The current configuration balances analytical rigor with strategic insight.

```
# Review current model parameters
grep -A 5 "PARAMETER" *.modelfile

# Test parameter modifications (advanced users only)
# Modify model files and recreate models for testing
```

Response length parameters (num_predict) significantly impact both response quality and execution time. Current settings are optimized for comprehensive analysis while maintaining reasonable execution times.

Repeat penalty parameters affect response coherence and prevent repetitive content. Current settings are optimized for chain collaboration and content building.

Chain Optimization Strategies

Optimize chain performance by selecting appropriate model combinations and structuring requests for maximum efficiency. Understanding model strengths and collaboration patterns enables more effective chain design.

Begin chains with models that provide foundational analysis, then add strategic enhancement and synthesis. This progression ensures that later models have substantial content to build upon and enhance.

```
# Optimized chain progression
mirador-ez chain "Foundation → Enhancement → Synthesis"
financial_planning_expert_v5 enhanced_agent_fast_v3

# Avoid redundant model combinations
# Don't combine models with overlapping expertise without clear differentiation
```

Structure chain requests to provide clear context and objectives that enable each model to contribute unique value. Vague or overly broad requests may result in redundant analysis or missed opportunities for specialized insight.

Monitor chain execution to identify models that consistently add value versus those that provide redundant information. This analysis enables optimization of model combinations and chain patterns.

Output Quality Enhancement

Enhance output quality by developing effective query structuring techniques and result interpretation strategies. Understanding how to maximize value from Mirador responses improves decision-making support and practical utility.

Structure queries to provide sufficient context while maintaining focus on specific objectives. Include relevant constraints, preferences, and circumstances that enable models to provide targeted recommendations.

```
# High-quality query structure
mirador-ez ask financial_planning_expert_v5
"Budget optimization for Louisville family with 80000 income,
goal of buying 250000 home within 2 years, current savings of
15000, preference for Highlands area near good JCPS schools"
```

Review outputs systematically to identify actionable recommendations, strategic insights, and areas requiring additional analysis. Develop a consistent approach to extracting value from comprehensive responses.

Create follow-up queries that address specific questions or concerns identified during output review. This iterative approach enables progressive refinement of analysis and recommendations.

This comprehensive usage guide provides the foundation for effective Mirador utilization across all aspects of personal life automation. Regular practice with these patterns and techniques will maximize the value you receive from your AI orchestration framework.